National Weather Service
Storm Data and Unusual Weather Phenomena

January 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

WIZ046>047-051>052-056>060-062>068-068>072 **Marquette - Green Lake - Fond Du Lac - Sheboygan - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha**

04 1200CST 0 0 Winter Weather/Mix
05 0300CST

The first widespread snowfall of the winter season to affect south-central and southeast Wisconsin resulted in an estimated 300 to 400 vehicle accidents. At least a dozen injuries required medical treatment. Generally 3 to 5 inches of snow fell, with an isolated 6 inch measurement in Juneau (Dodge Co.). Milwaukee (Milwaukee Co.) picked up 5 inches while Madison (Dane Co.) came in with 4 inches. Road surfaces become very slippery. Just east of Madison, two multi-vehicle accidents (44 and 17 vehicles respectively) occurred near the Intersection of Interstates 90 and 94. Drifts were reported to be one-foot deep. In Milwaukee County, 27 accidents were reported, while in Kenosha County, several dozens occurred. At Mitchell Field (Milwaukee Co.), 30 flights were delayed and 10 were cancelled.

WIZ046>047-051>052-056>060-062>072 **Marquette - Green Lake - Fond Du Lac - Sheboygan - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha**

16 1200CST 0 0 Winter Weather/Mix
17 0600CST

South-central and southeast Wisconsin were affected by a freezing rain event that switched to snow. Road surfaces became very slippery due to initial ice glazings of 1/16 to 1/8 inch. West of Fort Atkinson (Jefferson Co.), a car slid across the center line and collided head-on with a semi-tractor trailer. The driver of the car was killed instantly (indirect death). Several dozens of vehicle accidents were noted elsewhere. Snow accumulations at the end of this event ranged from 1/2 to 2 inches across southeast Wisconsin and 2 to 4 inches from Lafayette and Iowa Counties northeast to Sheboygan County.

WIZ059-065>066 **Washington - Waukesha - Milwaukee**

26 1200CST 0 0 Heavy Snow
27 1200CST

A long-duration, heavy snow event affected three counties in southeast Wisconsin. Most of the snow occurred in two separate periods, with the first period consisting of "system snow" and the second period consisting of "lake-effect" snow. Dozens of vehicle accidents were noted in newspapers. In Jefferson County, near Lake Mills, a roll-over accident claimed the life of a 14-year old student on the way to school (indirect death). In Germantown (Washington Co.), 9.9 inches of snow was measured, followed by 9.3 inches at a location 4 miles south of the city of Waukesha (Waukesha Co.), and 8.9 inches on the UW-Milwaukee campus (Milwaukee Co.). Elsewhere across south-central and southeast Wisconsin, generally 2 to 5 inches of snow was reported.

National Weather Service
Storm Data and Unusual Weather Phenomena

February 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

WIZ046>047-051>052-056>057-062>063-067>068 **Marquette - Green Lake - Fond Du Lac - Sheboygan - Sauk - Columbia - Iowa - Dane - Lafayette - Green**

05 0200CST 0 0 Heavy Snow
06 0600CST

Heavy snow accumulating to 6 to over 9 inches affected parts of south-central and east-central Wisconsin. In addition, northeast to east winds gusting to 22 to 26 knots (25 to 30 mph) resulted in blowing and drifting snow which hindered travel. Snow started to fall about 1600 CST on February 4th, while 1-inch accumulations were noted by 1800 CST. Much of the snow accumulations occurred by 1400 CST on February 5th. A severe weather spotter in Westfield (Marquette Co.) reported 9.6 inches for high honors. Other reports, based on spotter, highway department, and cooperative sources, included 9.5 inches in Baraboo and 8.5 inches in Reedsburg (Sauk Co.); 8.0 inches in Wisconsin Dells (Columbia Co.); roughly 8.0 inches in the extreme northwest corner of Iowa County west of of Avoca, and in extreme northwest Green Lake County northwest of Princeton; 7.0 inches in Monroe (Green Co.), about 6.5 inches in extreme western Lafayette County and extreme western Fond du Lac County; 6.5 inches Mazomanie and Fitchburg (Dane Co.); and 6.1 inches in Elkhart Lake (Sheboygan Co.). Based on newspaper reports, it's safe to estimate that 100 to 150 vehicle accidents occurred due to icy and snow-covered roads during the height of this heavy snow event. Elsewhere across south-central and southeast Wisconsin, 3 to 5.5 inches of snow accumulated, resulting in dozens of additional vehicle accidents.

WIZ046>047-051>052-056>060-062>063-065>072 **Marquette - Green Lake - Fond Du Lac - Sheboygan - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha**

08 2100CST 0 0 Winter Weather/Mix
09 1800CST

Strong southwest winds behind a cold front gusted to 30 to 43 knots (35 to 50 mph) over much of south-central and southeast Wisconsin. These wind gusts knocked many tree branches out of trees. In addition, these winds were responsible for widespread blowing and drifting of recent new snows which made it difficult for highway snowplow crews keep roads open during the pre-dawn hours. Jefferson County is documented separately as a "High Wind" event due to a peak gust of 55 knots (63 mph) measured at a severe weather spotter's residence on the southwest side of the city of Watertown. Several public schools delayed the start of classes or canceled classes due to the blowing and drifting snow and poor road conditions. A high school student was killed (indirect death) during the late evening hours of February 8th, in a 3-vehicle accident in Cedarburg (Ozaukee Co.) due to icy, windswept, road conditions.

WIZ064 **Jefferson**

09 0230CST 0 0 High Wind (MG55)
0900CST

Powerful southwest winds behind a cold front gusted to 55 knots (63 mph) at a severe weather spotter's residence on the southwest side of the city of Watertown (Jefferson Co.). Elsewhere across the county gusts were in the 43 to 52 knot range (50 to 60 mph). These wind gusts knocked many tree branches out of trees. In addition, these winds were responsible for widespread blowing and drifting snow which made it difficult for highway snowplow crews keep roads open during the pre-dawn hours.

WIZ046>047-051 **Marquette - Green Lake - Fond Du Lac**

25 0200CST 0 0 Dense Fog
0900CST

Dense fog developed overnight, resulting in visibilities of 1/4 mile or less. Newspaper reports indicated that many icy frost deposits occurred on roads and bridges. Snowmelt due to maximum temperatures in the mid to upper 30s on February 24th contributed the moisture needed to saturate the air as the night progressed. Newspaper reports indicated that some vehicle accidents occurred.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

WIZ046>047-051>052-057>059-063>066-068>072 **Marquette - Green Lake - Fond Du Lac - Sheboygan - Columbia - Dodge - Washington - Dane - Jefferson - Waukesha - Milwaukee - Green - Rock - Walworth - Racine - Kenosha**

26 **0200CST** **0900CST** **0** **0** **Dense Fog**

Dense fog developed overnight, resulting in visibilities of 1/4 mile or less. Newspaper reports indicated that many icy frost deposits occurred on roads and bridges. Snowmelt due to maximum temperatures in the mid to upper 30s on February 25th contributed the moisture needed to saturate the air as the night progressed. Newspaper reports indicated that some airplane flights were delayed and at least a dozen vehicle accidents occurred.

WIZ052-059>060 **Sheboygan - Washington - Ozaukee**

27 **0500CST** **0900CST** **0** **0** **Dense Fog**

Dense fog developed overnight, resulting in visibilities of 1/4 mile or less. Newspaper reports indicated that many icy frost deposits occurred on roads and bridges. Snowmelt due to maximum temperatures in the mid to upper 30s on February 26th contributed the moisture needed to saturate the air as the night progressed. Newspaper reports indicated that some vehicle accidents occurred.

National Weather Service
Storm Data and Unusual Weather Phenomena

March 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
LAKE MICHIGAN									
LMZ646	**Wind Pt Lt Wi To Winthrop Hbr Il**								
Kenosha	**23**	**1620CST 1650CST**			**0**	**0**			**Marine Tstm Wind (MG41)**
LMZ646	**Wind Pt Lt Wi To Winthrop Hbr Il**								
Kenosha	**23**	**2205CST**			**0**	**0**			**Marine Tstm Wind (MG38)**
WISCONSIN, Southeast									
Rock County									
2 E Newville	**01**	**1455CST**			**0**	**0**	**5K**		**Thunderstorm Wind (EG52)**
Walworth County									
Whitewater	**01**	**1515CST**			**0**	**0**			**Hail(1.50)**
Jefferson County									
1 S Hebron	**01**	**1522CST**			**0**	**0**			**Hail(0.75)**
Sauk County									
5.5 SSE Reedsburg	**01**	**1522CST**			**0**	**0**			**Funnel Cloud**
Sauk County									
5 SE Reedsburg to 5.5 ESE Reedsburg	**01**	**1522CST 1525CST**			**0**	**0**			**Hail(0.75)**
Waukesha County									
2 W Oconomowoc	**01**	**1533CST**			**0**	**0**			**Hail(1.00)**
Jefferson County									
Sullivan	**01**	**1542CST**			**0**	**0**			**Hail(0.75)**
Dane County									
Marshall	**01**	**1547CST**			**0**	**0**			**Hail(1.00)**
Jefferson County									
Waterloo	**01**	**1558CST**			**0**	**0**			**Hail(1.00)**
Jefferson County									
6.2 E Ft Atkinson	**01**	**1603CST**			**0**	**0**	**2K**		**Thunderstorm Wind (EG52)**
Dodge County									
4.5 W Ashippun	**01**	**1629CST**			**0**	**0**	**2K**		**Thunderstorm Wind (EG52)**
Waukesha County									
Oconomowoc	**01**	**1629CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG52)**

Breaks in the cloud cover allowed daytime heating to generate early-season, severe thunderstorms across south-central and southeast Wisconsin. Although large hail up to 1.50 inches in diameter was the primary type of severe weather, there were scattered reports of powerful straight-line thunderstorm winds to around 52 kts (60 mph) which toppled trees and/or power lines. The ground was "covered white" with hail southeast of Reedsburg (Sauk Co.) and in Sullivan (Jefferson Co.). Synoptically, a low pressure and associated warm front moved northeast through southern Wisconsin, setting the stage for thunderstorm activity. Maximum daytime temperatures were in the mid 50s to lower 60s.

Rock County									
4.8 SSE Clinton	**05**	**0536CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG56)**
Rock County									
Clinton	**05**	**0540CST**			**0**	**0**	**40K**		**Thunderstorm Wind (EG65)**
Rock County									
3 W Orfordville	**05**	**0542CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG52)**
Rock County									
4.4 SE Janesville	**05**	**0547CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG52)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Rock County									
2.3 NNW Johnstown Cen	**05**	**0555CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG52)**
Rock County									
6 NE Milton	**05**	**0600CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG56)**
Walworth County									
Como	**05**	**0600CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG52)**
Walworth County									
2.7 W La Grange	**05**	**0600CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG56)**
Walworth County									
2.8 NW La Grange	**05**	**0601CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG52)**
Jefferson County									
1.2 SW Palmyra	**05**	**0603CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG52)**
Jefferson County									
.8 NE Palmyra	**05**	**0605CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG52)**

A fast-moving, broken, line of thunderstorms moved northeast through Rock, Walworth, and Jefferson counties during the early morning hours of March 5, 2004. Although the thunderstorm cells were compact on radar, their wet-microbursts generated locally, brief, powerful, straight-line winds of 50 to 65 knots (58-75 mph). In the city of Clinton, half of a home's roof was torn off, and the resultant wind-generated debris then damaged a nearby garage and a pick-up truck. Otherwise the powerful winds uprooted large trees or cracked large tree limbs, or toppled power lines/power poles.

WIZ046-057-063-069	**Marquette - Columbia - Dane - Rock**								
	07	**0300CST** **1000CST**			**0**	**0**			**Winter Weather/Mix**

A mixture of snow (1 inch or less) and freezing drizzle/rain generated a thin layer of ice on road surfaces, resulting in dozens of vehicle accidents in parts of south-central Wisconsin. One person died (indirect fatality) in a one-car accident near Edgerton (Rock Co.). Near the city of Beloit (Rock Co.), a semi collided with another vehicle, and more than a hundred gallons of fuel spilled onto the road. County 911 centers were swamped with calls of dozens of vehicles running off roads

WIZ051>052-058>060-064>066-069>072	**Fond Du Lac - Sheboygan - Dodge - Washington - Ozaukee - Jefferson - Waukesha - Milwaukee - Rock - Walworth - Racine - Kenosha**								
	07 **08**	**1100CST** **0000CST**			**0**	**0**	**33K**		**Strong Wind (MG34)**

Strong, gradient, west to northwest winds, on the back side of a low pressure system, raked parts of south-central and southeast Wisconsin during the afternoon hours of March 7, 2004. Scattered snow showers were associated with the strong winds. Peak gusts were in the 35 to 49 kt range (40-57 mph), resulting in numerous reports of tree limbs knocked out of trees and/or pushed onto power lines. A few vehicles sustained minor damage due to tree-branch debris.

WIZ046>047-051>052-056>060-062>072	**Marquette - Green Lake - Fond Du Lac - Sheboygan - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha**								
	14	**0800CST** **1500CST**			**0**	**0**	**52K**		**Strong Wind (EG39)**

Strong, gradient southwest winds were replaced with west to northwest winds after a cold front moved through south-central and southeast Wisconsin. There were numerous reports of broken tree limbs, with some of them downing power lines. A few vehicles sustained minor damage due to tree-branch debris.

National Weather Service
Storm Data and Unusual Weather Phenomena

April 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
LAKE MICHIGAN									
LMZ643	**Sheboygan To Pt Washington Wi**								
Sheboygan	**18**	**0048CST**			**0**	**0**			**Marine Tstm Wind (MG48)**
LMZ645	**North Pt Lt To Wind Pt Wi**								
Milwaukee Harbor	**18**	**0110CST**			**0**	**0**			**Marine Tstm Wind (MG40)**
Scattered strong thunderstorms moved out over the nearshore waters of Lake Michigan east of the Sheboygan to Milwaukee area. Strong wind gusts were generated.									
WISCONSIN, Southeast									
Green County									
Monroe to 3 E Monroe	**17**	**0230CST**			**0**	**0**	**75K**		**Thunderstorm Wind (EG56)**
Isolated severe thunderstorm produced powerful downburst winds (estimated to 56 kts, or 65 mph) that blew a shed down, forced the roof of a barn to cave in, uprooted several large trees, and toppled some power lines.									
Green Lake County									
4.5 S Markesan to 4.8 SSE Markesan	**17**	**2345CST 2350CST**			**0**	**0**	**100K**		**Thunderstorm Wind (EG65)**
Fond Du Lac County									
Lamartine	**17 18**	**2355CST 2355CST**			**0**	**0**	**20K**		**Lightning**
Fond Du Lac County									
Oakfield to Eden	**17 18**	**2355CST 0005CST**			**0**	**0**	**250K**		**Thunderstorm Wind (EG61)**
Green Lake County									
Green Lake	**18**	**0005CST**			**0**	**0**	**20K**		**Lightning**
Waukesha County									
1 SW Oconomowoc to Waukesha Co Arpt	**18**	**0010CST 0055CST**			**0**	**0**	**50K**		**Thunderstorm Wind (MG57)**
Green Lake County									
Marquette	**18**	**0015CST**			**0**	**0**	**50K**		**Lightning**
Dodge County									
Fox Lake	**18**	**0028CST**			**0**	**0**	**1K**		**Thunderstorm Wind (MG62)**
A pre-frontal band of thunderstorms pulsed up to severe limits and produced powerful downburst winds up to an estimated 65 kts (75 mph) across part of south-central and southeast Wisconsin. In Green Lake County, a barn was blown down, and a tree fell on to a vehicle. In addition, several other large trees were uprooted in the Markesan area, and a lightning fire damaged a home near the village of Marquette. In Fond du Lac County, several barns, sheds, or silos were damaged, and large trees were uprooted. In addition, a lightning fire damaged a home near Lamartine. In Fox Lake (Dodge Co.), the window of a storm door was blown in and several large trees were uprooted. In Waukesha County, an old barn southwest of Oconomowoc was blown down. Over the remainder of south-central and southeast Wisconsin the thunderstorm winds were in the 35 to 43 kt range (40 to 50 mph).									
WIZ046>047-051>052-056>060-062>072	**Marquette - Green Lake - Fond Du Lac - Sheboygan - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha**								
	18 19	**0800CST 1100CST**			**0**	**0**	**280K**		**Strong Wind (MG43)**
Strong gradient winds affected south-central and southeast Wisconsin for many hours. Maximum wind gusts were generally in the 40 to 49 kt range (46 to 57 mph). There were numerous newspaper reports of broken tree branches hitting power lines with a resultant power outage. Strong cross winds may have been indirectly responsible for the death of a motorcyclist who lost control and crashed in a farm field in the Town of Yorkville of Racine County. In Sheboygan County near Glenbeulah the strong winds moved a silo off its foundation about 16 inches, ripped a door off a barn, and knocked down some large trees. In the city of Sheboygan the strong winds blew in several windows at a car dealership. Near the city of Oregon (Dane Co.) a home was damaged by a large,									

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

wind-toppled tree. Electrical companies estimated that about 20,000 customers in south-central and southeast Wisconsin lost power at one time or another.

LAKE MICHIGAN

LMZ646 **Wind Pt Lt Wi To Winthrop Hbr Il**
Kenosha **08** **2135CST** **0** **0** **Marine Tstm Wind (MG38)**
Leftover pieces of severe storms moved out over Lake Michigan and generated strong wind gusts

LMZ646 **Wind Pt Lt Wi To Winthrop Hbr Il**
Kenosha **12** **1625CST** **0** **0** **Marine Tstm Wind (MG35)**

LMZ645 **North Pt Lt To Wind Pt Wi**
Milwaukee Harbor **12** **1650CST** **0** **0** **Marine Tstm Wind (MG38)**

LMZ665 **Lm Sheboygan Wi To Winthrop Harbor Il Ewd Byd 5Nm To Mid Line Of Lake**
Sheboygan **17** **2232CST** **0** **0** **Marine Tstm Wind (MG35)**

LMZ665 **Lm Sheboygan Wi To Winthrop Harbor Il Ewd Byd 5Nm To Mid Line Of Lake**
Sheboygan **20** **1800CST** **0** **0** **Marine Tstm Wind (MG36)**
A broken line of thunderstorms continued to press east after producing areas of large hail and damaging winds across south-central and southeast Wisconsin, and reached the lakeshore between 1800 and 2030 CST. The Sheboygan C-Man (Sheboygan Co.) reported a wind gust of 36 knots at 1800 CST.

LMZ646 **Wind Pt Lt Wi To Winthrop Hbr Il**
Kenosha **21** **0815CST** **0** **0** **Marine Tstm Wind (MG41)**

LMZ646 **Wind Pt Lt Wi To Winthrop Hbr Il**
1 E Kenosha **21** **0823CST** **0** **0** **Waterspout**

LMZ646 **Wind Pt Lt Wi To Winthrop Hbr Il**
Kenosha **21** **0850CST** **0** **0** **Marine Tstm Wind (MG54)**
The same cluster of thunderstorms that produced areas of wind damage across parts of south-central and most of southeast Wisconsin, moved over the lake waters a short time later. Maximum wind gusts of 41 to 52 knots (47 to 60 mph) were reported at the Coastal Observing Station in Kenosha at 0815 and 0850 CST, respectively. Those storms also produced a waterspout 1 mile east of Kenosha around 0823 CST.

LMZ643 **Sheboygan To Pt Washington Wi**
Sheboygan **21** **1615CST** **0** **0** **Marine Tstm Wind (MG43)**

LMZ645 **North Pt Lt To Wind Pt Wi**
Milwaukee Harbor **21** **1630CST** **0** **0** **Marine Tstm Wind (MG35)**

LMZ646 **Wind Pt Lt Wi To Winthrop Hbr Il**
Kenosha **21** **1705CST** **0** **0** **Marine Tstm Wind (MG42)**
The second round of thunderstorms plauging southern Wisconsin during the afternoon hours, moved over the lakeshore with gusty winds. Wind gusts of 35 to 45 knots (40 to 52 mph) were reported from Sheboygan through the Milwaukee Harbor and to Kenosha from 1630 to 1715 CST.

WISCONSIN, Southeast

Jefferson County
5 SW Ft Atkinson to Ft Atkinson **07** **0050CST** **0** **0** **Hail(0.75)**

Lafayette County
2 SW Benton to **07** **1653CST** **0** **0** **Hail(1.00)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

5 ESE Shullsburg **1715CST**

Isolated severe thunderstorms popped up and produced large hail. This day would be the first of 6 or 7 consecutive days with thunderstorms and possible severe weather across south-central and southeast Wisconsin due to a stangant weather pattern that allowed several cold fronts to stall over Illinois and then move north as a warm front the next day

Sheboygan County									
Sheboygan	**08**	**0400CST 0900CST**			**0**	**0**			**Heavy Rain**
Dane County									
1 N Sun Prairie	**08**	**0537CST**			**0**	**0**			**Hail(0.75)**
Sauk County									
Lake Delton to Reedsburg	**08**	**1915CST 2230CST**			**0**	**0**	**25K**		**Flash Flood**

Basements flooded along with gravel washouts and roads closed as water levels rose to 1 foot deep.

Fond Du Lac County									
Fond Du Lac	**08**	**1920CST 2230CST**			**0**	**0**	**25K**		**Flash Flood**

Some water damage to homes and businesses. Gravel washouts and some roads closed due to water depths of 1 foot.

Green Lake County									
Markesan	**08**	**1926CST 2230CST**			**0**	**0**	**25K**		**Flash Flood**

Basements flooded along with gravel washouts and roads closed as water levels rose to 1 foot deep.

Sauk County									
Reedsburg	**08**	**2030CST 2200CST**			**0**	**0**			**Heavy Rain**
Sauk County									
5 NW Rock Spgs	**08**	**2039CST**			**0**	**0**			**Hail(0.75)**
Sauk County									
North Freedom	**08**	**2055CST**			**0**	**0**			**Hail(0.75)**
Waukesha County									
4 S Waukesha	**08**	**2058CST 2100CST**			**0**	**0**			**Hail(0.75)**
Milwaukee County									
Greendale	**08**	**2100CST 2300CST**			**0**	**0**			**Heavy Rain**
Racine County									
Union Grove	**08**	**2139CST**			**0**	**0**			**Hail(0.75)**
Kenosha County									
Kenosha	**08**	**2215CST**			**0**	**0**			**Hail(0.75)**

Short lines or clusters of thunderstorms, some of them severe with large hail, moved through south-central and southeast Wisconsin. Due to intense rainfalls and training of storms, heavy rains occurred in some locations. This was especially true from northern Sauk County through southern Marquette County and over to Sheboygan County. WSR-88D Doppler radar rainfall amounts ranged from 2 to 4 inches within 1 to 2 hours. Consequently, flash flooding occurred over parts of northern Sauk County, eastern Green Lake County, and central Fond du Lac County, where some roads were closed due to water depths of 1 to 3 feet and gravel shoulder washouts. A number of homes also had moderate basement flooding in these areas. Urban/small stream flooding occurred in and around the city of Sheboygan (Sheboygan Co.) during the morning hours after 3.12 inches of rain fell overnight. A couple cars stalled in water covering low-lying areas of the city, and some basements had water infiltration. Minor urban flooding due to heavy rains was also reported from the Reedsburg (Sauk Co.) and Greendale (Milwaukee Co.) areas. Refer to the Green Lake County May 25th flood event for additional information.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Racine County
Caledonia | **09** | **1200CST**
1400CST | | | **0** | **0** | | | **Heavy Rain**

Racine County
Burlington | **09** | **1251CST** | | | **0** | **0** | | | **Thunderstorm Wind (MG50)**

Dodge County
Waupun | **09** | **2240CST** | | | **0** | **0** | | | **Hail(0.75)**

Scattered thunderstorms, some pulsing to severe limits, generated large hail or powerful winds. Some large trees were uprooted in the Burlington area (Racine Co.) as winds gusted to 50 kts (58 mph). Heavy rains of 2 inches in 1 to 2 hours in the Caledonia area (Racine Co.) resulted in urban-type flooding. Water depths on some roads briefly reached 6 to 8 inches.

Milwaukee County
Wauwatosa to 7 NW Milwaukee | **10** | **1230CST** | | | **0** | **0** | | | **Hail(1.00)**

Milwaukee County
Brown Deer | **10** | **1930CST**
2030CST | | | **0** | **0** | | | **Heavy Rain**

Scattered thunderstorms moved through southeastern Wisconsin. One pulsed to severe limits and dumped large hail that covered the ground white in Milwaukee County. The accompanying heavy rains in the Brown Deer made one low-lying road briefly impassible.

Marquette County
1 S Packwaukee | **12** | **1653CST** | | | **0** | **0** | | | **Thunderstorm Wind (EG52)**

Green Lake County
5 S Berlin | **12** | **1700CST**
1705CST | | | **0** | **0** | | | **Hail(0.75)**

Marquette County
6 NE Montello | **12** | **1720CST** | | | **0** | **0** | | | **Hail(0.75)**

Marquette County
6 NE Montello | **12** | **1720CST** | | | **0** | **0** | | | **Thunderstorm Wind (EG52)**

Short lines or clusters of thunderstorms moved through parts of south-central and southeast Wisconsin. Some of them became severe with damaging straight-line winds and large hail. Several large trees were uprooted in the Packwaukee to Montello area of Marquette County.

Columbia County
Portage | **13** | **1035CST** | | | **0** | **0** | **15K** | | **Lightning**

Lightning struck the chimney of a school, knocking bricks down to the ground. A hole was blown through the roof, and the telephone and computer lines were damaged. Damage amount is estimated.

WIZ072 **Kenosha**

14 **0145CST** | **0** | **0** | **960K** | **500K** | **Flood**
31 **2359CST**

The Fox River at New Munster rose above its flood stage of 10 feet on May 14th at 0145 CST. The river crested at 13.72 feet on May 24th at 1900 CST, 3.72 feet above flood stage. At this crested level, moderate flooding occurred in low lying areas, damaging crops and flooding basements. The river fell below flood stage on June 6th. Damage to roads totaled $192,000, damage to the water control facility totaled $290,000, and damage to public buildings and public utilities totaled $362,000. For more information, please consult the June edition of StormData for ending flood times. Refer to the Green Lake County May 25th flood event for additional information for May.

Dane County
Madison | **17** | **1800CST**
1930CST | | | **0** | **0** | | | **Heavy Rain**

National Weather Service
Storm Data and Unusual Weather Phenomena

May 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
WISCONSIN, Southeast									
Sauk County									
Spring Green	**17**	**1827CST** **1837CST**			**0**	**0**			**Hail(0.75)**
Sauk County									
Spring Green	**17**	**1827CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Iowa County									
5 W Arena	**17**	**1835CST**			**0**	**0**			**Hail(0.75)**
Jefferson County									
Jefferson	**17**	**1930CST** **2100CST**			**0**	**0**			**Heavy Rain**
Dane County									
2 N Utica	**17**	**1940CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Green County									
Brodhead	**17**	**2005CST**			**0**	**0**			**Funnel Cloud**
Jefferson County									
Watertown	**17**	**2015CST**			**0**	**0**			**Thunderstorm Wind (MG52)**
Rock County									
Beloit to Clinton	**17**	**2028CST** **2035CST**			**0**	**0**			**Thunderstorm Wind (EG56)**

A line of thunderstorms, some severe, rolled through south-central and southeast Wisconsin. Large hail and damaging straight-line winds gusting to 56 kts (65 mph) were generated. Large trees and some power poles were damaged, especially in the Beloit to Clinton area of Rock County. As usual, the accompanying heavy rains resulted in urban flooding (water over the curb) in Madison (Dane Co.), and in Jefferson (Jefferson Co.) where rainfall of 1/2 inch within 15 minutes was reported. Refer to the Green Lake County May 25th flood event for additional information

Dodge County									
Waupun to 2.8 SE Lomira	**20**	**0245CST** **0600CST**			**0**	**2**			**Heavy Rain**
Sheboygan County									
1 W Random Lake	**20**	**0445CST**			**0**	**0**	**130K**		**Lightning**

May 20th was the first of three days out of four that had two rounds of severe weather or heavy rains across south-central and southeast Wisconsin. Heavy rains in the Waupun to Lomira area (Dodge Co.) during the early morning hours of May 20th resulted in urban/small stream flooding. In addition, a 2-vehicle accident occurred near Lomira. Two people were injured in this accident, which was initiated by blinding rains and lightning. In Sheboygan County, lightning struck a church. The resultant fire destroyed the 130-year old church.

Green County									
Brodhead	**20**	**1730CST**			**0**	**0**	**1K**		**Lightning**
Kenosha County									
Salem	**20**	**1835CST**			**0**	**0**			**Hail(1.00)**
Kenosha County									
2 NW Pleasant Prairie	**20**	**1839CST**			**0**	**0**			**Hail(1.50)**
Kenosha County									
1 SE Paddock Lake	**20**	**1853CST**			**0**	**0**	**25K**		**Thunderstorm Wind (EG61)**
Kenosha County									
.5 NNW Salem to 5 NE Paddock Lake	**20**	**1900CST** **1930CST**			**0**	**0**	**300K**	**300K**	**Flash Flood**
Racine County									
1 W Racine	**20**	**1922CST**			**0**	**0**			**Hail(1.00)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
WISCONSIN, Southeast									
Racine County									
1 SE Elmwood Park	**20**	**1923CST**			**0**	**0**			**Hail(1.75)**
Racine County									
1 SE Elmwood Park	**20**	**1923CST**			**0**	**0**			**Hail(1.75)**
Kenosha County									
4 NNW Kenosha to 4 WNW Kenosha	**20**	**1931CST**			**0**	**0**			**Hail(1.00)**
Racine County									
1 W Racine	**20**	**1936CST**			**0**	**0**			**Hail(3.00)**
Kenosha County									
5 NW Kenosha	**20**	**1950CST 2100CST**			**0**	**0**	**100K**	**200K**	**Flash Flood**
Racine County									
3 S Sturtevant	**20**	**1950CST 2100CST**			**0**	**0**	**100K**	**300K**	**Flash Flood**

Severe weather round #2 on May 20th featured damaging straight-line winds, large hail (up to golfball size), and flash flooding as several short lines or clusters of thunderstorms moved across south-central and southeast Wisconsin. In the Paddock Lake area (Kenosha Co.), the powerful wind gust to 56 kts (65 mph) toppled large trees, with one falling onto a home. Flash flooding over Kenosha County was the result of slow-moving, training thunderstorms that dumped 2.54 inches of rain in Paddock Lake within 45 minutes. Water levels in this city quickly rose to 1 to 3 feet, resulting in floating or stalled cars, damage to basements, and gravel washouts. In addition, mudslides and severe crop erosion occurred in the surrounding countryside. In Somers Township (5 NW of Kenosha in Kenosha Co.), almost one-half of the roads were under water, gravel washouts were common, and basement damage was noted. Gravel washouts and basement flooding were also reported south of Sturtevant (Racine Co.). Refer to the Green Lake County May 25th flood event for additional information. Lightning struck a home in Brodhead, resulting in a minor fire.

Ozaukee County									
2.5 N Port Washington	**21**	**0430CST**			**0**	**0**	**100K**		**Lightning**
Dane County									
Sun Prairie	**21**	**0500CST 0700CST**			**0**	**0**			**Heavy Rain**
Lafayette County									
3 N Belmont	**21**	**0629CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Washington County									
Slinger	**21**	**0700CST 0830CST**			**0**	**0**			**Heavy Rain**
WIZ059	**Washington**								
	21	**0700CST 0830CST**			**0**	**0**	**353K**	**150K**	**Flood**
Washington County									
Hartford to Newburg	**21**	**0718CST 0730CST**			**0**	**0**	**350K**		**Thunderstorm Wind (EG78)**
Dane County									
Madison	**21**	**0720CST**			**0**	**0**	**150K**		**Lightning**
Rock County									
Beloit	**21**	**0730CST**			**0**	**0**			**Thunderstorm Wind (EG50)**
Rock County									
1 SW Clinton	**21**	**0735CST**			**0**	**0**			**Thunderstorm Wind (EG50)**
Ozaukee County									
Cedarburg to	**21**	**0740CST**			**0**	**0**	**50K**		**Thunderstorm Wind (MG52)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
WISCONSIN, Southeast									
Grafton									
Ozaukee County									
Port Washington	**21**	**0748CST**			**0**	**0**	**150K**		**Thunderstorm Wind (EG65)**
Rock County									
Janesville	**21**	**0753CST**			**0**	**0**			**Thunderstorm Wind (EG50)**
Walworth County									
La Grange	**21**	**0810CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Kenosha County									
Kenosha	**21**	**0820CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Kenosha County									
Twin Lakes	**21**	**0835CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Racine County									
Sturtevant	**21**	**0850CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Ozaukee County									
Port Washington	**21**	**1630CST**			**0**	**0**	**25K**		**Lightning**

A morning round of severe thunderstorms affected parts of south-central and most of southeast Wisconsin, bringing with it mostly reports of damaging wind. Some of the stronger wind reports occurred in Washington and Ozaukee County where pockets of widespread tree and structural damage resulted. Hundreds of trees were toppled which crashed onto the roofs of many homes and vehicles from Hartford to Newburg in Washington County. Damage was estimated at nearly 350,000 dollars. Winds were estimated at 78 knots (90 mph) based on damage reports. In Ozaukee County, winds toppled trees which crushed 4 vehicles and 6 homes causing about 150,000 dollars in damage. Trees were also uprooted and deposited on Interstate 43 near Port Washington. Winds were estimated at 65 knots (75 mph), or hurricane strength. Other reports of damaging winds were noted across Dane, Rock, Walworth, Racine, and Kenosha counties with mainly scattered areas of tree damage. In addition to damaging winds, areas of urban and low lying flooding were reported in Sun Prairie and Slinger. Water was over the curbs in Sun Prairie and water was reported to have covered Highway 60 in Slinger. Water damage to basements, roads, water control systems, public buildings and public utilities totaled 353,000 dollars in Washington County. Lightning was reported to have started two buildings on fire in and near Port Washington (Ozaukee Co.) and is believed to have started an apartment complex on fire in Madison as well. Total lightning and fire damage was estimated at 125,000 dollars in Port Washington and 150,000 dollars in Madison (Dane Co.).

Sauk County									
Reedsburg	**21**	**1430CST**			**0**	**0**	**25K**		**Lightning**
Dane County									
Windsor	**21**	**1502CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Dane County									
De Forest	**21**	**1506CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Milwaukee County									
1.5 E Brown Deer	**21**	**1530CST** **1630CST**			**0**	**0**			**Heavy Rain**
Waukesha County									
2 SE Pewaukee	**21**	**1613CST**			**0**	**0**			**Thunderstorm Wind (MG56)**
Dane County									
Madison	**21**	**1730CST** **1800CST**			**0**	**0**			**Heavy Rain**
Kenosha County									
Twin Lakes to	**21**	**1815CST**			**0**	**0**	**200K**	**100K**	**Flash Flood**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Kenosha **2100CST**

Racine County

Union Grove to Franksville **21** **1830CST** **2115CST** **0** **0** **100K** **Flash Flood**

A second round of thunderstorms on May 21st came rolling into south-central and southeast Wisconsin later in the afternoon and evening bring more damaging wind gusts, heavy rain, and lightning. Trees were reported down across mostly Dane County as a small, but intense, cluster of thunderstorms moved through. Trees were reported down in De Forest and Windsor as a result of 52 knot estimated winds (60 mph). These thunderstorms, in addition to more thunderstorms across southeast Wisconsin, brought heavy rain and localized flooding to parts of southern Wisconsin. Heavy rain and flooding in Kenosha and Twin Lakes caused 200,000 dollars in property damage (mainly basements, gravel washouts, and crop erosion), flash flooding across Racine County caused roads to flood and gravel to be washed out, and urban flooding near Brown Deer closed major intersections. Refer to the Green Lake County May 25th flood event for additional information. Lightning struck a garage and set it on fire near Reedsburg causing 25,000 dollars in damage.

WIZ071 **Racine**

21 **1950CST** **0** **0** **72K** **50K** **Flood**
25 **1452CST**

The Root River Canal at Raymond rose above its flood stage of 9 feet on May 21st at 1950 CST. The river crested at 11.26 feet on May 23rd at 1400 CST, 2.26 feet above flood stage. At this crested level, moderate flooding occurred. Damage to lowland crops and home basements was noted along the Root River Canal. The river fell below flood stage on May 25th at 1452 CST.

WIZ067 **Lafayette**

22 **1237CST** **0** **0** **50K** **50K** **Flood**
25 **0840CST**

The East Branch Pecatonica River at Blanchardville rose above its flood stage of 11 feet on May 22nd at 1237 CST. The river crested at 13.62 feet on May 24th at 0345 CST, 2.62 feet above flood stage. At this crested level, minor flooding occurred. Damage to lowland crops and home basements was noted along the East Branch Pecatonica River. The river fell below flood stage on May 25th at 0840 CST.

WIZ056-056 **Sauk**

22 **1656CST** **0** **0** **200K** **Flood**
29 **0748CST**

The Baraboo River at Baraboo rose above its flood stage of 16 feet on May 22nd at 1556 CST. The river crested at 19.67 feet on May 26th at 0330 CST, 3.67 feet above flood stage. At this crested level, minor flooding occurred. The river fell below flood stage on May 29th at 0748 CST. The Baraboo River at Rock Springs rose above its flood stage of 18.5 feet on May 23rd at 1342 CST. The river crested at 20.99 feet on May 25th at 0700 CST, 2.49 feet above flood stage. At this crested level, major flooding occurred. An estimated 200K dollars in crop damage was reported along the Baraboo River. The river fell below flood stage on May 27th at 1828 CST.

Iowa County

Blanchardville **22** **2305CST** **0** **0** **Thunderstorm Wind (EG56)**

Lafayette County

Benton **22** **2330CST** **0** **0** **100K** **200K** **Flash Flood**
23 **0300CST**

Several reports of houses flooded, people evacuated, mudslides destroyed freshly planted crops.

Lafayette County

Darlington **22** **2345CST** **0** **0** **Flash Flood**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
WISCONSIN, Southeast									
	23	**0300CST**							
Green County									
New Glarus	**23**	**0005CST**			**0**	**0**			**Hail(0.75)**
Green County									
New Glarus	**23**	**0005CST**			**0**	**0**	**25K**		**Thunderstorm Wind (EG52)**
Green County									
4 N New Glarus to Monticello	**23**	**0030CST 0300CST**			**0**	**0**	**100K**	**200K**	**Flash Flood**
A mudslide destroyed freshly planted crops and some basements were flooded									
Dane County									
Paoli	**23**	**0031CST**			**0**	**0**			**Hail(1.00)**
Dane County									
3 NW Stoughton	**23**	**0045CST**			**0**	**0**			**Hail(0.75)**
Sauk County									
Plain to Baraboo	**23**	**0045CST 0400CST**			**0**	**0**	**150K**	**300K**	**Flash Flood**
Dane County									
Blue Mounds to Marxville	**23**	**0100CST 0400CST**			**0**	**0**	**100K**	**300K**	**Flash Flood**
Iowa County									
Highland to Arena	**23**	**0200CST 0400CST**			**0**	**0**	**100K**	**300K**	**Flash Flood**
Marquette County									
Packwaukee to Westfield	**23**	**0300CST 0630CST**			**0**	**0**	**50K**	**200K**	**Flash Flood**
Dane County									
Fitchburg to Madison	**23**	**0330CST 0630CST**			**0**	**0**	**200K**		**Flash Flood**
Rock County									
1 E Milton	**23**	**0410CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Walworth County									
4 NE Lake Geneva	**23**	**0440CST**			**0**	**0**	**50K**		**Thunderstorm Wind (EG65)**

A large complex of thunderstorms, mainly consisting of very heavy rain and damaging winds, raked through most of southern Wisconsin during the early morning hours. This was round number one for the day. Flash flooding was the main threat due to recent heavy rain and saturated ground. This flash flooding mainly affected south-central Wisconsin consisting of Dane, Sauk, Iowa, Lafayette, and Green counties. Lafayette and Green counties were hit especially hard. Flash flooding in Benton (Lafayette County) caused people to be evacuated from their homes. 100,000 dollars in costs resulted from flood damage. Flash flooding in Darlington (Lafayette County) caused mudslides to occur in farmers fields (destroying recently planted crops) and caused basements to flood, causing another 75,000 dollars in damage. Flash flooding in Marquette, Sauk, western Dane, and Iron counties consisted of gravel washouts, mudslides, and basement damage. In addition, flash flood rains forced a roof of a building to collapse, and basement/foundation damage was inflicted on an apartment complex. Damaging winds of 50 to 56 knots (58 to 65 mph) was the result from a small line of severe thunderstorms which produced scattered areas of tree damage form Lafayette County through Walworth County. Northeast of Lake Geneva, powerful thunderstorm winds blew a pole shed down and snapped power lines. Trees and power lines were reported down in Blanchardville, New Glarus, and Lake Geneva. Refer to the Green Lake County May 25th flood event for additional information.

WIZ068-068	**Green**								
	23	**0530CST**			**0**	**0**	**1K**	**200K**	**Flood**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

30 0607CST

The Sugar River at Brodhead rose above its flood stage of 5 feet on May 23rd at 0530 CST. The river crested at 8.30 feet on May 25th at 0415 CST, 3.30 feet above flood stage. At this crested level, minor flooding occurred. Crop damage along the Sugar River was reported. It fell below flood stage on May 27th at 2235 CST. The Pecatonica River at Martintown rose above its flood stage of 13.5 feet on May 24th at 1945 CST. The river crested at 16.42 feet on May 26th at 1815 CST, 2.92 feet above flood stage. At this crested level, minor flooding occurred. The river fell below its flood stage on May 30th at 0607 CST.

WIZ060 **Ozaukee**

23	**0537CST**			**0**	**0**	**135K**		**Flood**
25	**0026CST**							

The Milwaukee River at Cedarburg rose above its flood stage of 10 feet on May 23rd at 0537 CST. The river crested at 13.19 feet on May 23rd at 2145 CST, 2.49 feet above flood stage. At this crested level, moderate flooding occurred. Damage to road systems, public buildings, public utilities, and basements were reported. The river fell below flood stage on May 25th at 0026 CST.

WIZ052 **Sheboygan**

23	**0845CST**			**0**	**0**	**100K**		**Flood**
24	**2054CST**							

The Sheboygan River at Sheboygan rose above its flood stage of 8 feet on May 23rd at 0845 CST. The river crested at 9.29 feet on May 23rd at 2330 CST, 1.29 feet above flood stage. At this crested level, minor flooding occurred. Basement flooding and public utility damage was reported along the Sheboygan River. The river fell below flood stage on May 24th at 2045 CST.

WIZ057 **Columbia**

23	**1200CST**			**0**	**0**	**100K**	**300K**	**Flood**
31	**2359CST**							

Lowland flooding began to result after several rounds of heavy rain during the month of May. Road system damage, public building damage, public utility damage, basement damage, and crop damage was reported across Columbia County.

Columbia County									
2 N Arlington	**23**	**1720CST**			**0**	**0**			**Funnel Cloud**
Dane County									
3 S Oregon	**23**	**1725CST**			**0**	**0**			**Hail(1.00)**
Dane County									
3 W Stoughton	**23**	**1735CST**			**0**	**0**			**Hail(0.75)**
Rock County									
2 E Evansville	**23**	**1744CST**			**0**	**0**			**Funnel Cloud**
Dane County									
6 NW Madison	**23**	**1753CST**			**0**	**0**			**Funnel Cloud**
Dane County									
3.3 ESE Stoughton to 3.8 WNW Albion	**23**	**1755CST 1756CST**	**1**	**25**	**0**	**0**			**Tornado (F0)**

An advanced spotter videotaped a tornado that briefly spun up at 1755 CST, 3.3 miles east-southeast of Stoughton (Dane Co.), and dissipated at 1756 CST, 3.8 miles west-northwest of Albion (Dane Co.). The tornado's path was only a mile long and the width was about 25 yards. No damage was reported and this tornado was deemed an F0. The average path width was about 25 yards.

Dane County									
1.2 SE De Forest to 1.9 E De Forest	**23**	**1759CST 1804CST**	**1.3**	**25**	**0**	**0**			**Tornado (F0)**

A tornado spun up 1.2 miles southeast of DeForest (Dane Co.) around 1759 CST, and dissipated around 1804 CST, 1.9 miles east

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

of De Forest (Dane Co.). Specifically, it spun up just northeast of the intersection of STH 51 and Vinburn Rd. and ended about 0.1 mile southwest of the intersection of Mueller Rd. and Portage Rd. The tornado's path was 1.3 miles long and 25 yards wide. No damage was reported and this tornado was determined to be an F0. Average width was about 25 yards.

Dane County									
3 NNE Albion	**23**	**1800CST**			**0**	**0**			**Hail(0.75)**
Dodge County									
Reeseville	**23**	**1813CST**			**0**	**0**			**Funnel Cloud**
Jefferson County									
Jefferson	**23**	**1820CST**			**0**	**0**			**Hail(0.75)**
Jefferson County									
3 S Johnson Creek	**23**	**1820CST**			**0**	**0**			**Hail(0.75)**
Waukesha County									
2 NE Delafield	**23**	**1824CST**			**0**	**0**			**Hail(1.00)**
Columbia County									
2 SW Fall River to 2.1 SW Fall River	**23**	**1825CST**	**0.1**	**25**	**0**	**0**			**Tornado (F0)**

A tornado spun up very briefly at 1825 CST, 2 miles southwest of Fall River in Columbia County. A storm survey determined the tornado's path was only a tenth of a mile and the width was about 25 yards. Its estimated position is about 0.3 mile west-northwest of the intersection of Hall Rd. and Freck Rd. No damage was reported and it was determined the tornado was an F0.

Dodge County									
2 N Beaver Dam	**23**	**1852CST**			**0**	**0**			**Hail(0.75)**
Waukesha County									
1 S Oconomowoc	**23**	**1853CST**			**0**	**0**			**Hail(0.88)**
Dodge County									
6 SW South Beaver Dam	**23**	**1855CST**			**0**	**0**			**Funnel Cloud**
Dodge County									
Kekoskee	**23**	**1859CST**			**0**	**0**			**Hail(1.00)**
Ozaukee County									
Countywide	**23**	**1900CST 2030CST**			**0**	**0**			**Heavy Rain**
Waukesha County									
Delafield	**23**	**1907CST**			**0**	**0**			**Funnel Cloud**
Waukesha County									
1 NE Menomonee Falls	**23**	**1913CST**			**0**	**0**			**Funnel Cloud**
Waukesha County									
Menomonee Falls	**23**	**1935CST**			**0**	**0**			**Hail(1.00)**
Sheboygan County									
7 W Cascade	**23**	**1939CST 1941CST**			**0**	**0**			**Hail(0.75)**
Milwaukee County									
Brown Deer	**23**	**1941CST**			**0**	**0**			**Hail(1.00)**
Ozaukee County									
Mequon	**23**	**1943CST**			**0**	**0**			**Hail(1.50)**
Ozaukee County									
10 S Port Washington	**23**	**1943CST**			**0**	**0**			**Hail(1.50)**
Ozaukee County									
Mequon	**23**	**1945CST**			**0**	**0**			**Hail(0.75)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Milwaukee County

Brown Deer 23 1948CST 0 0 **Hail(1.50)**

Sheboygan County

2 S Plymouth 23 1955CST 0 0 **Hail(0.75)**

Moist and unstable air along a stalled frontal boundary set the stage for supercell thunderstorm development during the afternoon and evening hours. This was round number two for the day. Numerous supercells developed across southern Wisconsin by the late afternoon hours, which produced three tornadoes, numerous funnel clouds, several large hail reports, and heavy rains. Funnel cloud reports were collected from Columbia, Dane, Rock, Dodge, and Waukesha counties between 1720 CST and 1913 CST. The first tornado spun up 3.3 miles east-southeast of Stoughton (Dane Co.), the second tornado spun up 1.2 miles southeast of De Forest (Dane Co.), and the third tornado spun up 2 miles southwest of Fall River (Columbia Co.). All three tornadoes had no damage associated with them and were all classified as F0s (for detailed path lengths, path widths, and spin up and dissipating points, please consult details above). In addition to tornadoes, funnel clouds, and large hail, these storms produced heavy rain. Urban flooding resulted across Ozaukee County after storms produced 1.25 inches of rain in only a 30 minute period. A few roads were closed and gravel washouts were common. Refer to several flood and flash flood events for May 23rd, 24th, and 25th, for related information.

WIZ069 **Rock**

24 0122CST 0 0 300K 500K Flood
31 2359CST

The Rock River at Afton rose above its flood stage of 9 feet on May 24 at 0122 CST and crested on June 1st. The river fell below its flood stage on July 8th. The Rock River at Newville rose above its flood stage of 10 feet on May 26 at 1430 CST and crested on June 6th. Water damage to road systems, parks, treatment plants, and basements was noted along most rivers and streams. In addition, crop damage and erosion was moderate to severe in low lands. The Rock River at Newville fell below its flood stage on July 6th. For more information, please refer to the June 2004 and July 2004 editions of StormData. Refer to the narrative for the May 25th flood event in Green Lake County for related details.

WIZ064 **Jefferson**

24 1632CST 0 0 500K 500K Flood
31 2359CST

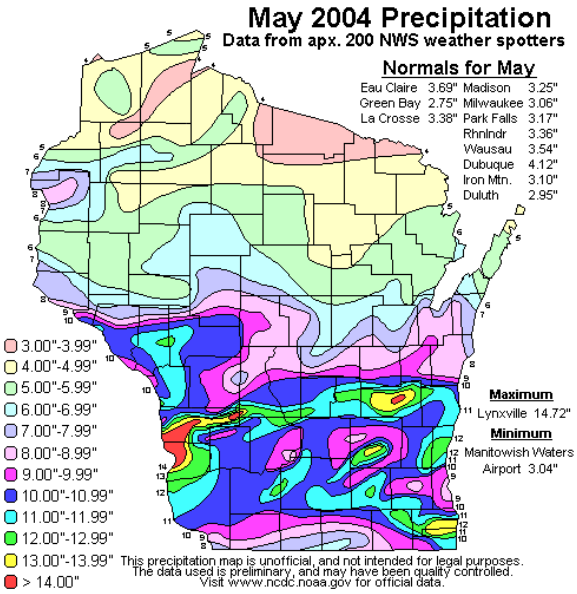
The Rock River at Jefferson rose above its flood stage of 10 feet on May 24th at 1632 CST. The Rock River at Jefferson crested on June 3rd at 11.51 feet. The Crawfish River at Milford rose above its flood stage of 7 feet on May 25th at 0400 CST. The river crested on June 2nd at 8.57 feet. Water damage to road systems, parks, treatment plants, and basements was noted along most rivers and streams. In addition, crop damage and erosion was moderate to severe in low lands. For more information, please refer to the June 2004 edition of StormData. Refer to the narrative of the May 25th flood event in Green Lake County for related details.

WIZ047 **Green Lake**

25 2115CST 0 0 300K 200K Flood
31 2359CST

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast



The Fox River at Berlin rose above its flood stage of 13 feet on May 25th at 2115 CST. The river crested on June 18th at 16.24 feet, 3.24 feet above flood stage. Water damage to road systems, parks, treatment plants, and basements was noted along most rivers and streams. In addition, crop damage and erosion was moderate to severe in low lands. For more information, please refer to the June 2004 edition of StormData.

Several all-time monthly record precipitation totals (for any month) were recorded during May across south-central and southeast Wisconsin. Official totals that broke these records include: 13.85" in Union Grove (Racine Co.), 13.55" in Racine (Racine Co.), 13.47" in Fond du Lac (Fond du Lac Co.), 12.83" in Germantown (Washington Co.), 12.16" in Burlington (Racine Co.), 12.01" 5 miles northeast of Ripon (Fond du Lac Co.) 11.26" in Fort Atkinson (Jefferson Co.), and 11.09" in Stoughton (Dane Co.). Twenty-four other stations broke monthly precipitation records. Unofficially, a monthly total of 15.26 inches was measured on the south side of the city of Fond du Lac (Fond du Lac County), at the home of the public works director. There was another unnofficial 15+ inch report near Cedarburg (Ozaukee Co.), and an unofficial 14+ inch report from near La Grange (Walworth Co.). The majority of the monthly rain across south-central and southeast Wisconsin came during the periods of May 7-14, and May 20-23

Minor to major river flooding was a concern due to widespread monthly rainfall amounts of 8 to 14 inches. The following locations had crests at or above 2 feet above flood stage sometime during the month of May: the Baraboo River at Baraboo, 3.7 feet, the Fox River at New Munster, 3.7 feet, the Sugar River at Brodhead, 3.3 feet, the Pecatonica River at Martintown, 2.9 feet, the east branch of the Pecatonica River at Blanchardville, 2.6 feet, the Baraboo River at Rock Springs, 2.5 feet, the Root River Canal at Raymond, 2.3 feet, and the Milwaukee River at Cedarburg, 2.2 feet. Most of south-central and southeast Wisconsin has not experienced such widespread flooding since 1993, and some areas haven't seen such severe flooding in 20 to 25 years.

Areas of flooding across south-central and southeast Wisconsin resulted in property and crop damage. The following counties experienced significant flood damage and received a national presidential declaration: Columbia, Dane, Fond du Lac, Green, Kenosha, Ozaukee, Racine, Sheboygan, and Washington. According to the Wisconsin Uniform Disaster Situation Report, about $197,508 in spending resulted from debris clearance across those counties, about $217,963 in spending resulted from emergency protective measures, about $330,954 in damage to road systems, about $306,000 in damage water control facilities, about $76,854 from public building damage, about $755,369 from public utility damage, and $184,016 from other expenses. Total expenses come to about $1,991,810. Two-hundred homes and 10 businesses reported minor flood damage in Columbia County; 989 homes reported minor flood damage in Fond du Lac County; 68 homes and 15 businesses reported minor flood damage in Ozaukee County; and 11 homes and 1 business reported minor flood damage, and 1 home reported major flood damage in Racine County.

Heavy rain during the month of May resulted in widespread flooding in farmers' fields, resulting in extensive crop damage. Many farmers had to wait several weeks to replant once flood waters receded, delaying the growing season 3 to 4 weeks. At the end of May, many farmers had only planted 35 to 40% of their corn crop (75 to 80% is normal), and only 5 to 10% of their soybean crop (50 to 60% is normal). Heavy rains during the month of May contributed directly to the aid of the replenishing of Lake Michigan water levels. Water levels had dropped as much as 4 feet between the years of 1997 and 2003. In May alone, water levels rose 11 inches in response to heavy rain and significant run off.

National Weather Service
Storm Data and Unusual Weather Phenomena

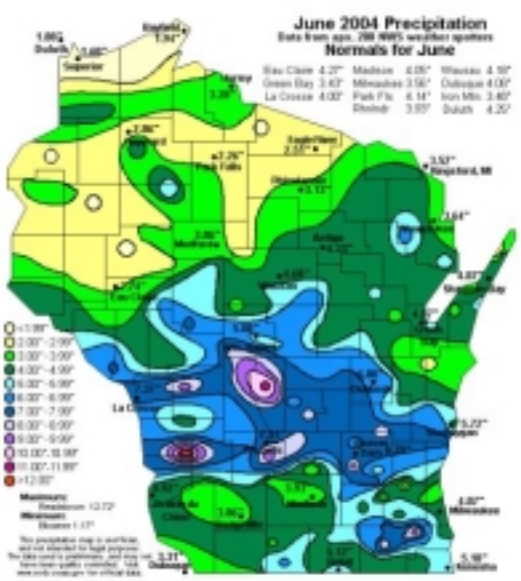
June 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
LAKE MICHIGAN									
LMZ645	**North Pt Lt To Wind Pt Wi**								
Wind Point	**23**	**1605CST**			**0**	**0**			**Marine Hail (0.88)**
LMZ646	**Wind Pt Lt Wi To Winthrop Hbr Il**								
Kenosha	**23**	**1620CST**			**0**	**0**			**Marine Tstm Wind (MG41)**
LMZ645	**North Pt Lt To Wind Pt Wi**								
Cudahy	**23**	**2035CST**			**0**	**0**			**Marine Hail (0.75)**
LMZ644	**Pt Washington To North Pt Lt Wi**								
2 E Mequon to Mequon	**23**	**2059CST**			**0**	**0**			**Marine Tstm Wind (EG52)**
LMZ646	**Wind Pt Lt Wi To Winthrop Hbr Il**								
1 S Wind Point	**23**	**2108CST**			**0**	**0**			**Marine Hail (1.00)**
LMZ646	**Wind Pt Lt Wi To Winthrop Hbr Il**								
1 S Wind Point	**23**	**2108CST**			**0**	**0**			**Marine Tstm Wind (MG69)**
LMZ646	**Wind Pt Lt Wi To Winthrop Hbr Il**								
Kenosha	**23**	**2205CST**			**0**	**0**			**Marine Tstm Wind (MG38)**

Two separate lines/small clusters of thunderstorms moved east out over Lake Michigan. The thunderstorms dumped large hail and generated strong wind gusts.

WISCONSIN, Southeast

WIZ046>047-051>052-056>060-062>072	**Marquette - Green Lake - Fond Du Lac - Sheboygan - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha**								
	01 30	**0000CST 2359CST**			**0**	**0**	**35.5M**	**216M**	**Flood**



Scattered to widespread heavy rains across south-central and southeast Wisconsin during the period of June 9-12, 2004 kept many rivers and streams at or above flood stage for a good part, or most of the month. Monthly rainfall totals generally ranged from 4 to 7 inches across south-central and southeast Wisconsin, with some scattered spots in Sauk, Columbia, Dodge, Walworth, Racine, and Kenosha Counties picking up 7 to 9.5 inches, or 50 to 100% above normal. In some cases, stretches of some rivers actually went above flood stage in May, 2004. Refer to flood and flash flood events in May, 2004, for additional information. During June, 2004, the high water levels kept much of the low, bottom-land under water near rivers and streams; closed some major state highways; forced water into basements; damaged corn, soy bean, and alfalfa crops; delayed planting of entire fields; washed out gravel road shoulders; or damaged foundations of homes and businesses. Two flash flood events occurred on June 9th (Columbia and Dodge

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Co.) - refer to those event narratives for additional information. In general, the June flooding was the worst since 1993 on a widespread basis, but locally it was the worst in the past 25 to 30 years. Federal Disaster Declaration 1526 covered all 20 counties in south-central and southeast Wisconsin for storms, tornadoes, and flooding for the period of May 19-July 3, 2004. All counties qualified for "individual assistance" and "individual assistance & public assistance became available for the counties of Marquette, Green Lake, Fond du Lac, Columbia, Dodge, Ozaukee, Jefferson, and Kenosha. Below is a county-by-county breakdown (keep in mind that flood stage for rivers in these counties is 1 foot above bankfull - ponding of water in lowlands continues at between bankfull and flood stage).

Marquette Co: Minor basement damage to 354 homes, and major basement damage to 17 homes. Estimated private property damage of $1M. Total damage to public infrastructure totaled $205,000. At least 28K acres of farm crop ruined for a crop loss of about $10M.

Green Lake Co: The Fox River at Berlin continued to remain above flood stage for all of June. The river rose above flood stage of 13 feet on May 25th at 2115 CST, crested at 16.24 feet on June 18th at 0500 CST, 3.24 feet above flood stage (major flooding, new, all-time river stage record). On July 9th, the river fell below flood stage. At least 30,000 sand bags were used in Berlin to minimize property damage. The Fox River at Princeton rose above flood stage of 9.5 feet on June 10th at 2130 CST, crested at 12.19 feet on June 19th at 0900 CST, 2.69 feet above flood stage (major flooding). The river fell below flood stage on July 1st. Consult the July 2004 edition of StormData for more information. County-wide, minor basment flood damage to 22 homes, and major damage to 9 homes. At least 3 houses were completely destroyed. Estimated private property damage of $2M. Total public infrastructure damage totaled $716,000. Crop losses about $15M.

Fond du Lac Co: At least 3869 houses reported basement flooding. Minor damage to 1040 homes, and major damage to 31 homes (total of $4.21M). Minor damage to 8 businesses, and major damage to 1 business (total of $231K). Total private sector flood damage about $4.4M. Total damage to public infrastructure totaled $363K. Crop losses estimated at $63M.

Sheboygan Co: The Sheboygan River at Sheboygan rose above flood stage of 8 feet on June 11th at 1036 CST, crested at 10.36 feet on June 12th at 1700 CST, 2.36 feet above flood stage (moderate flooding). The river fell below flood stage on June 13th at 1720 CST. Crop losses estimated at $15M. Private property damage estimated at $1M.

Sauk Co: The Baraboo River at Baraboo rose above flood stage of 16 feet again on June 10th at 0127 CST, after flooding once before during May. It crested at 18.69 feet on June 12th at 0445 CST, 2.69 feet above flood stage (minor flooding). The river fell below flood stage on June 17th at 1206 CST. The Rock River at Rock Springs rose above flood stage of 18.5 feet on June 14th at 0859 CST, crested at 18.67 feet on June 15th at 0105 CST, 0.17 feet above flood stage (minor flooding). The river fell below flood stage on June 15th at 1745 CST. Minor basement flood damage to 67 homes, with major damage to 6, and 5 houses completely destroyed. Total estimated private property damage at $2M. Estimated public infrastructure damage of $100K. Total crop losses estimated at $10M.

Columbia Co: The Wisconsin River at Portage rose above flood stage of 17 feet on June 13th at 0000 CST, crested at 17.61 feet on June 16th at 0703 CST, 0.61 feet above flood stage (minor flooding). The river fell below flood stage on June 17th at 1229 CST. Sixty-nine houses reported basement damage. Total damage to public infrastructure totaled $1,938,500. Estimated private property damage of $2.0M. Estimated crop damage of $20M.

Dodge Co: The Beaverdam River at Beaver Dam rose above flood stage of 9 feet on June 9th at 1915 CST, crested at 10.68 feet on June 14th at 1615 CST, 1.68 feet above flood stage (moderate flooding). The river fell below its flood stage on June 25th at 2242 CST. The Rock River at Horicon rose above flood stage of 8.5 feet on June 12th at 0000 CST, crested at 9.06 feet on June 21st at 1730 CST, 0.56 feet above flood stage (moderate flooding). The river fell below flood stage on June 22nd at 0645 CST. Minor basement flood damage to 196 homes. Estimated private property damage of $2M. Total public infrastructure damage about $800K. Estimated crop damage about $3M on 7000 acres.

Washington Co: Estimated crop damage about $6M. Estimated private property damage of $2M. Estimated public infrastructure damage about $1M.

Ozaukee Co: The Milwaukee River at Cedarburg rose above flood stage of 11 feet on June 11th at 1900 CST, crested at 12.97 feet on June 13th at 1730 CST, 1.97 feet above flood stage (minor flooding). The river remained above flood stage until June 16th at 2300 CST. One-hundred and nine houses reported basement flooding, with 1 house reporting major flooding and 8 houses being inaccessible. Estimated private property damage of $2M. Total damage to public infrastructure totaled $612,700. Estimated crop damage of $5M.

Iowa Co: Estimated crop losses of $2M.

Dane Co: Lake levels were 1 to 3 feet above normal. Minor baement flood damage to 127 homes, and major damage to 3 homes. Estimated private property damage of $1M. Estimated crop losses of $3M.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Jefferson Co: The Rock River at Jefferson, the Rock River at Fort Atkinson, and the Crawfish River at Milford remained above flood stage for most of June. The Rock River at Jefferson rose above flood stage of 10 feet on May 24th at 1632 CST, crested at 11.51 feet on June 2nd at 1900 CST, 1.51 feet above flood stage (moderate flooding). The river fell below flood stage on June 30th at 0809 CST. The Rock River at Fort Atkinson rose above flood stage of 6 feet on May 26th at 1200 CST and crested at 7.29 feet on June 4th at 2335 CST, 1.29 feet above flood stage (moderate flooding). The river fell below flood stage in early July. Consult the July 2004 edition of StormData for more information. The Crawfish River at Milford rose above flood stage of 7 feet on May 25th at 0400 CST and crested at 8.57 feet on June 2nd at 1700 CST, 1.57 feet above flood stage (minor flooding). The river fell below flood stage on June 26th at 0100 CST. The Rock River at Watertown rose above flood stage of 5.5 feet on June 10th at 0700 CST, crested at 6.09 feet on June 12th at 0115 CST, 0.59 feet above flood stage (moderate flooding). The river fell below flood stage on June 15th at 0126 CST. Minor basement flood damage to 187 homes, and 37 were inaccessible (especially on Blackhawk Island southwest of Ft. Atkinson). Total cost for public infrastructure reached $263,530. Estimated private property damage of $2.0M. Estimated crop damage of $20M.

Waukesha Co: Estimated private property damage of $1.0M. Estimated crop damage of $5M.

Milwaukee Co: Basement flooding damage to 236K homes. Estimated private property damage of $1M.

Lafayette Co: Estimated private property damage of $500K. Estimated crop losses of $1M.

Green Co: The Sugar River at Brodhead rose above flood stage of 5 feet on June 2nd at 0350 CST and crested at 5.04 feet on June 2nd at 0650 CST, 0.04 feet above flood stage (minor flooding). The river fell below flood stage on June 2nd at 1450 CST. Estimated private property damage of $100K. Estimated crop losses of $1M.

Rock Co: The Rock River at Afton continued to remain above flood stage for all of June. The river rose above flood stage of 9 feet on May 24th at 0122 CST, crested at 10.96 feet on June 1st at 0300 CST, 1.96 feet above flood stage (minor flooding). The Rock River at Afton remained above flood stage until July 8th. Consult the July 2004 edition of StormData for more information. The Rock River at Newville rose above flood stage of 10 feet on May 26th at 1430 CST, crested at 11.49 feet on June 5th at 2300 CST, 1.49 feet above flood stage (moderate flooding). The river fell below flood stage in early July. Consult the July 2004 edition of StormData for more information. The Rock River at Indianford rose above flood stage of 10 feet on June 1st at 1215 CST, crested at 15.29 feet on June 4th at 1045 CST, 0.29 feet above flood stage (minor flooding). The river fell below flood stage on June 9th at 0522 CST. Basement flood damage was noted as well as pier damage along the Rock River. Estimated private property damage of $1M. Estimated crop losses of $2M.

Walworth Co: Estimated private property damage of $500K. Estimated crop losses of $3M.

Racine Co: The Root River Canal at Raymond rose above flood stage of 9 feet on June 17th at 1545 CST, crested at 9.56 feet on June 18th at 0330 CST, 0.56 feet above flood stage (minor flooding). The river fell below flood stage on June 18th at 1900 CST. Estimated private property damage of $1M. Estimated crop losses of $5M.

Kenosha Co: The Fox River at New Munster rose above flood stage of 10 feet on May 14th at 0145 CST, crested at 13.73 feet on May 24th at 1345 CST, 3.73 feet above flood stage (moderate flooding). The river fell below flood stage on June 6th at 1726 CST. Minor basement flood damage occurred to 115 homes, and 10 others had flood damage. Total damage to public infrastructure about $1M. Estimated private property damage of $2M. Estimated crop losses of $8M.

Columbia County

Cambria	**09**	**1600CST**	**0**	**0**	**1M**		**Flash Flood**
	10	**0600CST**					

Dodge County

Randolph	**09**	**1800CST**	**0**	**0**	**2M**		**Flash Flood**
	10	**0900CST**					

Clusters of thunderstorms with heavy rains generated WSR-88D Doppler Radar rainfall estimates of 5 to 6 inches within 4 to 6 hours in Cambria (Columbia Co.), resulting in flash flooding. Further east, Randolph (Dodge Co.) was hit with a flash flood after torrential rainfalls (unofficial) of 8.6 inches fell during the evening hours of June 9th, followed by another 2.20 inches overnight. Interestingly, Randolph picked up 13.6 inches of rain in May, 2004, and 13 inches in June, 2004. Between May 7, 2004 and June 11, 2004, this city measured 25.60 inches of rain (normal for the entire year is bout 33 inches). Randolph sits a large bowl-shaped depression that has no outside drainage, which applified the flooding problem. The flash flood in Randolph flooded at least 300 homes, in some cases up to the 1st-floor windows. At least 15 homes had major flood damage, and 24 businesses were damaged. Numerous families were evacuated, and flood waters didn't recede until June 12th. In Cambria, Tarratt Lake on Duck Creek burst through a dam that supported STH 146. At least half of the road was washed away at that location, resulting in closure of that road for much of the remainder of the summer due to repairs. Luckily the dam didn't have a complete collapse, and no homes or businesses were damaged.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Washington County

3 S Thompson	**12**	**0200CST**			**0**	**0**	**3K**		**Lightning**

Washington County

Kewaskum	**12**	**0220CST** **0228CST**			**0**	**0**	**150K**		**Lightning**

Lightning struck a barn just outside Kewaskum, burning it to the ground. South of Thompson, lightning damaged the siding of a home.

Racine County

Waterford	**16**	**1700CST** **1810CST**			**0**	**0**			**Heavy Rain**

Marquette County

Endeavor to Packwaukee	**16**	**1747CST**			**0**	**0**			**Hail(0.75)**

Marquette County

Endeavor to Packwaukee	**16**	**1747CST** **1757CST**			**0**	**0**			**Thunderstorm Wind (MG52)**

Scattered thunderstorms developed across south-central and southeast Wisconsin during the late afternoon into early evening hours. A few storms became severe and produced isolated areas of damaging winds or hail. Heavy rain across Racine County resulted in urban and small stream areas to flood.

Milwaukee County

Hales Corners to Greenfield	**23**	**1525CST** **1530CST**			**0**	**0**			**Hail(1.00)**

Racine County

5 NE Union Grove	**23**	**1550CST**			**0**	**0**			**Hail(0.75)**

Racine County

Racine	**23**	**1605CST** **1610CST**			**0**	**0**			**Hail(0.88)**

Racine County

3 W Racine to Racine	**23**	**1605CST** **1615CST**			**0**	**0**			**Hail(0.88)**

Marquette County

4 N Oxford	**23**	**1855CST**			**0**	**0**			**Thunderstorm Wind (EG57)**

Marquette County

3.5 NNW Packwaukee to 4 SE Montello	**23**	**1900CST** **1915CST**	**11**	**200**	**0**	**0**	**1M**	**500K**	**Tornado (F2)**

A strong tornado spun up about a half-mile east of Interstate 39/STH 51, near the intersection of Fawn Ct. and CTH M, or 3.5 NNW of Packwaukee. This tornado increased to F2 strength (estimated 140-150 mph) as it tore east/southeast through the southern part of Montello. Numerous trees were uprooted. Four homes were destroyed, 25 sustained major damage, and 142 had minor damage. In addition, 9 agricultural buildings were damaged or destroyed. The tornado ended in a swampy, Fox River bottom-land area about 4 miles southeast of Montello (1 mile short of the county line and south of CTH C and east STH 22). The responsible supercell also spun up a different tornado earlier in Adams County. Prop damage estimated at $1.0 M. Average path width was about 175 yards.

Sauk County

4 NW La Valle	**23**	**1900CST**			**0**	**0**			**Thunderstorm Wind (EG61)**

Marquette County

Montello	**23**	**1905CST**			**0**	**0**	**2K**		**Hail(1.75)**

Dane County

2 WNW Marxville to 1.9 WNW Marxville	**23**	**1923CST**	**0.1**	**25**	**0**	**0**	**3K**		**Tornado (F0)**

A brief tornado spun up along Old Settlers Rd., just south of the Township line (or about 0.2 mile south of of the intersection of Old

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Settlers Rd. and Katzenbuechel Rd.). One home had a couple windows damaged by flying debris, and several large trees were uprooted or twisted/sheared on a couple properties. The typical sequence of events was observed by the home's owner's - heavy rain and some wind, then calm, then the freight-train noise, and they could barely close the front door. The responsible supercell moved southeast toward Madison and eventually spun up another tornado on the southwest side of Madisor.

Green Lake County

2 E Kingston	**23**	**1924CST**			**0**	**0**			**Funnel Cloud**

Dane County

Middleton	**23**	**1930CST**			**0**	**0**			**Hail(0.75)**

Green Lake County

Markesan	**23**	**1930CST**			**0**	**0**	**2K**		**Hail(1.75)**

Green Lake County

2 N Manchester to 6.4 SE Markesan	**23**	**1933CST 1942CST**	**9.4**	**400**	**0**	**0**	**1.4M**	**500K**	**Tornado (F3)**

A strong tornado spun up near the intersection of STH 73 and CTH H, about 2 miles north of the village of Manchester. It increased its strength to F3 (estimated 175-200 mph) as it moved southeast across the southern part of the city of Markesan. Numerous trees were uprooted. At least 18 homes or ag-buildings had minor damage, at least 9 homes or ag-buildings had major damage, and at least 21 homes or ag-buildings were destroyed. This tornado exited Green Lake County at a point 6.4 miles southeast of Markesan, just south of Lake Maria Rd., and continued southeast through Fond du Lac County. The responsible supercell also spun up different tornadoes earlier in Adams and Marquette Counties. Newspaper headline: "A Day Like No Other." Average path width was about 350 yards.

Columbia County

6.5 SW Wyocena to Pardeeville	**23**	**1935CST 1940CST**			**0**	**0**			**Thunderstorm Wind (EG56)**

Dane County

2.5 SW Middleton to 2.3 S Madison	**23**	**1935CST 1944CST**	**7.8**	**200**	**0**	**0**	**1.5M**		**Tornado (F1)**

A weak F1 tornado (100-110 mph) spun up just west of the southwest Beltline at a point 2.5 miles SW of Middleton (half-mile north of intersection of CTH S and Pleasant View Rd.). It moved east-southeast across the West Town Mall, through the UW-Madison Research Park, ultimately ending about 1/3 mile east of STH 151/Park St (2.3 miles south of Capitol Square). In the Research Park many windows were blown out of business offices, and damage was inflicted to UW-MSN agricultural buildings. At least 194 residential homes had minor damage (roof/siding), and 11 had major damage (windows/roofs - total of $410K). At least 8 businesses had minor damage, and 1 had major damage (roof partially torn off and 1 wall damaged). Total business damage was about $246K. The UW-Madison Research Park had about $729K in damage. Many vehicles sustained some degree of damage ($100K), and one semi was blown over. At least 1000 large trees were damaged. Estimated total tornado damage is $1.485M. An additional cleanup cost of about $347K was reported. At least 2000 customers lost their electrical power. Average path width was about 150 yards.

Green Lake County

4.2 SSE Markesan to 6.8 SE Markesan	**23**	**1935CST 1942CST**	**4**	**300**	**1**	**1**	**675K**	**300K**	**Tornado (F3)**

A strong tornado spun up about a mile directly east of Lake Maria in southeastern Green Lake County, or about 4.2 miles SSE of Markesan, moved east along Sunny Drive with F3 strength (estimated 175-200), and exited Green Lake County along Mielke Rd., or about 6.8 miles SE of Markesan. Numerous trees were uprooted. At least 8 homes or ag-buildings had minor damage, at least 5 homes or ag-buildings had major damage, and at least 5 homes or ag-buildings were destroyed. Near the intersection of Sunny Drive and Pleasant Drive, two people and most basement items were "sucked" out of their home's basement while the home was being destroyed. The husband was found dead and his wife was critically injured. Average path width was about 275 yards. M53PH

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Dane County

3.3 W Madison	**23**	**1940CST**			**0**	**0**	**10K**		**Thunderstorm Wind (EG65)**

Dodge County

3 N South Beaver Dam t Horicon	**23**	**1940CST 1945CST**			**0**	**0**			**Thunderstorm Wind (EG52)**

Fond Du Lac County

4 SW Alto	**23**	**1940CST**			**0**	**0**	**3K**		**Hail(1.75)**

Fond Du Lac County

2 SW Alto	**23**	**1942CST**			**0**	**0**			**Hail(0.75)**

Fond Du Lac County

5 SW Alto to 2.5 SSW Alto	**23**	**1942CST 1945CST**	**3.6**	**300**	**0**	**0**	**1.6M**	**300K**	**Tornado (F3)**

This tornado was a continuation of the tornado that moved east from the Lake Maria area of extreme southeastern Green Lake County. It maintained its F3 strength (175-200 mph) and moved east along Marshview Rd, only to merge with the F3 tornado moving east/southeast out of the Markesan area of southeast Green Lake County. The merger took place just east of a dogleg/bend of Oak Grove Rd., about 2.2 miles SSW of Alto. The civil Town of Alto reported that 8 residential homes had major damage. Four farms were affected with a tally of 8 ag-buildings/homes with minor damage, 19 with major damage, and 16 destroyed. Crop damage was severe. Public sector damage (roads/bridges) was about $100K. Average path width was about 275 yards.

Fond Du Lac County

4.7 SW Alto to Waupun	**23**	**1942CST 1950CST**	**7.2**	**400**	**0**	**0**	**6M**	**700K**	**Tornado (F3)**

This tornado was a continuation of the tornado that moved through the southern part of the city of Markesan (Green Lake Co.). It entered Fond du Lac County just south of Lake Maria Road, about 4.7 miles SW of Alto. It moved east-southeast on a line toward Waupun at F3 strength (estimated 175-200 mph), and actually merged with the Lake Maria tornado that moved east out of extreme southeastern Green Lake County. The merger took place just east of a dogleg/bend of Oak Grove Rd., about 2.2 miles SSW of Alto. The civil Town of Alto reported that 19 residential homes had major damage and 1 was destroyed. One business had major damage. Fourteen farms were affected with a tally of 8 ag-buildings/homes with minor damage, 19 with major damage, and 16 destroyed. Crop damage was severe. Public sector damage (roads/bridges) was about $225K. In the city of Waupun (Fond du Lac side), 4 homes had major damage, and roughly 150 had minor roof/siding damage due to severe tree damage. Average path width was about 300 yards.

Dane County

4.6 N Madison	**23**	**1945CST**			**0**	**0**			**Hail(0.75)**

Dodge County

Waupun	**23**	**1945CST**			**0**	**0**	**3K**		**Hail(1.75)**

Columbia County

1.5 N Friesland	**23**	**1947CST**			**0**	**0**			**Thunderstorm Wind (EG56)**

Columbia County

1.2 ESE Otsego	**23**	**1950CST**			**0**	**0**			**Thunderstorm Wind (EG56)**

Dodge County

Waupun to 2 SSE Lomira	**23**	**1950CST 2005CST**	**16.7**	**400**	**0**	**0**	**8M**	**500K**	**Tornado (F3)**

This tornado was a continuation of the tornado that moved east-southeast from Markesan (Green Lake Co.) through the southwest corner of Fond du Lac County (civil Town of Alto). In Dodge County it maintained its F3 strength (175-200 mph) as it moved east-southeast through the city of Waupun and through rural areas of northern Dodge County to a point 2 miles southeast of Lomira, where it dissipated just west of U.S. Highway 41. Many homes and vehicles in the Dodge County portion of Waupun were damaged. Toward Lomira, several dozens of agricultural buildings and homes were damage. Numerous trees were uprooted from

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Waupun to near Lomira, and some crop damage was noted. Estimated damage in Waupun was about $3M, and $2.5M in the civil Towns of Lomira and Le Roy. Average path width was about 300 yards.

Dodge County

2.5 NW Farmersville to Farmersville	**23**	**1958CST 2000CST**			**0**	**0**			**Thunderstorm Wind (EG56)**

Dodge County

Juneau	**23**	**2000CST**			**0**	**0**	**3K**		**Thunderstorm Wind (EG56)**

Fond Du Lac County

Oak Center	**23**	**2000CST**			**0**	**0**			**Thunderstorm Wind (EG52)**

Jefferson County

Cambridge	**23**	**2001CST**			**0**	**0**			**Hail(0.75)**

Fond Du Lac County

6 SW Campbellsport to 4 SSW Campbellsport	**23**	**2010CST 2015CST**	**4.6**	**150**	**0**	**0**	**100K**	**200K**	**Tornado (F1)**

A weak F1 tornado (90-100 mph) spun up about 6 miles southwest of Campbellsport in southern Fond du Lac County, at a point ½ mile east of the Dodge County line on Superior Drive. It tracked east-southeast to 4 miles south-southwest of Campbellsport and moved into Washington County where Lake Bernice Dr. intersects with ST. Kilian Dr. Mainly moderate tree and crop damage was noted, but one pole shed was destroyed. Average path width was about 125 yards.

Jefferson County

2 W Ft Atkinson	**23**	**2015CST**			**0**	**0**			**Hail(0.88)**

Jefferson County

5 SW Ft Atkinson to Ft Atkinson	**23**	**2015CST 2020CST**			**0**	**0**			**Thunderstorm Wind (EG80)**

Washington County

4 WNW Kewaskum to 1.5 NW Kewaskum	**23**	**2015CST 2018CST**	**3**	**150**	**0**	**0**	**10K**	**50K**	**Tornado (F1)**

This tornado (80-90 mph) was a continuation of the tornado that moved east-southeast from the area southwest of Campbellsport in southern Fond du Lac County. Originally this tornado was rated as F1 in Fond du Lac County, but after crossing the Washington/Fond du Lac County line near the intersection of Lake Bernice Dr. and St. Kilian Dr. it weakened to F0 status. It finally dissipated 1.5 miles northwest of Kewaskum, north of STH 28 and west of STH 45. Mainly light tree and crop damage was noted. Average path width was about 100 yards.

Washington County

4 NNE Jackson	**23**	**2019CST**	**0.1**	**25**	**0**	**0**			**Tornado (F0)**

A very brief F0 tornado (50-60 mph) spun up 4 miles north-northeast of Jackson in an open rural area just north of STH 143 and east of CTH G, or 0.6 miles northwest of Keowns. The tornado traveled southeast 0.1 miles and dissipated. No damage was reported.

Washington County

1 S West Bend	**23**	**2019CST**			**0**	**0**			**Hail(1.00)**

Jefferson County

Ft Atkinson	**23**	**2021CST**			**0**	**0**	**10K**		**Hail(1.75)**

Jefferson County

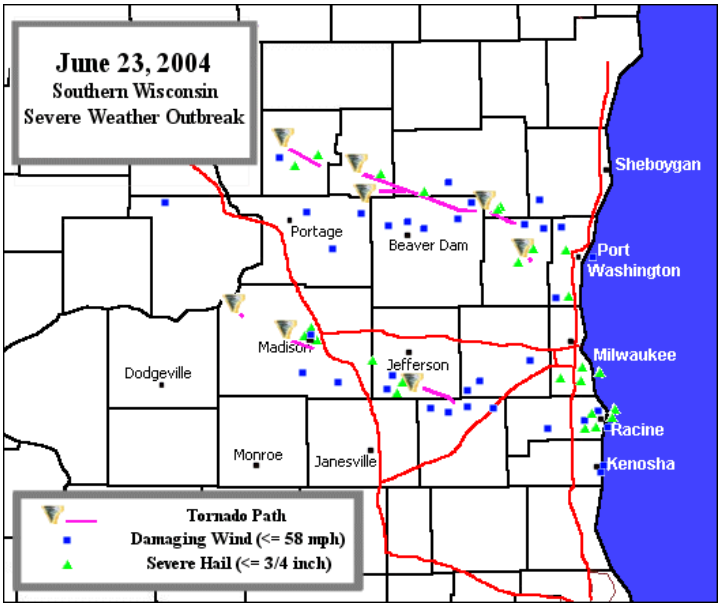
1.8 SE Cold Spg to 3.2 SW Palmyra	**23**	**2023CST 2033CST**	**7.1**	**150**	**0**	**0**	**150K**		**Tornado (F1)**

A weak F1 tornado (90-100 mph) spun up 1.8 miles east-southeast of Cold Springs and traveled east-southeast to the Jefferson/Walworth County line about 3.2 miles southwest of Palmyra. Shortly after it spun up this tornado destroyed a garage, one vehicle, a wind mill, and hay wagon. Later on, severely damaged a pole shed, damaged a couple vehicles, and suck a fair amount of insulation into a relatively new home that had closed windows and doors. Otherwise, many trees were uprooted or twisted. Average path width was about 125 yards.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
WISCONSIN, Southeast									
Sheboygan County									
3 SW Beechwood to Beechwood	**23**	**2025CST**			**0**	**0**			**Thunderstorm Wind (EG61)**
Walworth County									
1 S Whitewater to East Troy	**23**	**2025CST 2040CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Ozaukee County									
1 N Saukville	**23**	**2028CST**			**0**	**0**			**Hail(0.75)**
Walworth County									
7 ENE Whitewater to 3 NNW La Grange	**23**	**2033CST 2034CST**	**0.7**	**150**	**0**	**0**	**5K**		**Tornado (F1)**
This tornado is a continuation of the Jefferson County tornado. Once it crossed the Jefferson/Walworth County line about 7 miles east-northeast of Whitewater, or about 1 mile west of CTH H, this tornado continued east-southeast and dissipated a short time later 3 miles north-northwest of La Grange. Only tree damage was noted. Average path width was about 100 yards.									
Milwaukee County									
.5 W Milwaukee to Cudahy	**23**	**2035CST**			**0**	**0**			**Hail(0.75)**
Waukesha County									
3 SW Eagle	**23**	**2038CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Sheboygan County									
Hingham	**23**	**2040CST**			**0**	**0**			**Funnel Cloud**
Ozaukee County									
5 N Waubeka	**23**	**2045CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Washington County									
1 N Fillmore	**23**	**2052CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Dane County									
Oregon	**23**	**2053CST**			**0**	**0**			**Thunderstorm Wind (EG65)**
Racine County									
2 S North Cape to 1 S Wind Pt	**23**	**2055CST 2108CST**			**0**	**0**			**Thunderstorm Wind (MG69)**
Ozaukee County									
Thiensville	**23**	**2059CST**			**0**	**0**			**Funnel Cloud**
Ozaukee County									
Thiensville	**23**	**2059CST**			**0**	**0**	**50K**		**Hail(3.00)**
Ozaukee County									
Thiensville to 2 E Mequon	**23**	**2059CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Racine County									
Racine	**23**	**2106CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Racine County									
4 W North Bay to 1 SE Wind Pt	**23**	**2108CST 2112CST**			**0**	**0**			**Hail(1.00)**
Waukesha County									
New Berlin	**23**	**2130CST**			**0**	**0**			**Thunderstorm Wind (EG56)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast



Two rounds of severe weather affected parts of south-central and southeast Wisconsin on June 23rd, with the second round featuring 8 tornadoes, large hail (up to golf-ball size), and powerful straight-line downburst winds. A warm front moving north through the area resulted in favorable vertical wind shear to allow for supercell development.

The 1st round of severe weather was due to a broken line of intense thunderstorms moving across Walworth, Milwaukee, Racine and Kenosha counties. Hail of up to 1 inch in diameter and torrential rainfall accompanied these storms before they moved over Lake Michigan and weakened. The 2nd round of severe weather was dominated by 2 cyclic supercells - one moved east/southeast through Marquette, Green Lake, Fond du Lac, and Washington Counties, spinning up 5 separate tornadoes, dumping hail stones up to 3 inches in diameter, and hurricane-force downburst winds. The large hail dented several vehicles. Two of these were rated F3. Refer to the individual tornado reports for more details. A more southerly supercell tracked across extreme southern Sauk County and then made a partial right turn and headed southeast through Dane County, spinning up 2 tornadoes in the process, as well as large hail and downburst winds. One powerful downburst wind in Madison (Dane Co.) blew equipment off the roof of a business at the Midvale Shopping Mall. A semi southwest of Ft. Atkinson was blown over by straight-line wind gusts. This southern supercell eventually spun up another tornado in south-central Jefferson County which moved into north-central Walworth County. Refer to the individual tornado reports for more details.

Both supercells had downbursts that generated large hail and powerful, hurricane-force winds north and south of their tracks. Over all of Wisconsin, 16 tornadoes were documented on June 23rd, which is the 4th highest single-day total (record is 24 on May 8, 1988). For south-central and southeast Wisconsin, the 8 tornadoes on June 23rd was tied for the 4th highest single-day total (record is 11 on May 8, 1988).

National Weather Service
Storm Data and Unusual Weather Phenomena

July 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

LAKE MICHIGAN

LMZ645 **North Pt Lt To Wind Pt Wi**

Milwaukee Harbor **13** **1735CST** **0** **0** **Marine Tstm Wind (MG36)**

A band of scattered strong thunderstorms moved across the lake shore waters of southeast Wisconsin during the late afternoon on the 13th.

LMZ646 **Wind Pt Lt Wi To Winthrop Hbr Il**

Racine **21** **1310CST** **0** **0** **Marine Tstm Wind (MG55)**

Scattered strong thunderstorms developed over the southeast corner of Wisconsin and moved out over Lake Michigan during the mid-afternoon hours.

WISCONSIN, Southeast

WIZ047-064-069 **Green Lake - Jefferson - Rock**

01 **0000CST** **0** **0** **400K** **Flood**
09 **0700CST**

Leftover lowland, river flooding continued into early July on the Fox River in Green Lake County, as well along the lower Rock River from Ft. Atkinson to the Illinois border. This lowland flooding started in late May, 2004 and continued through June, into early July, 2004. The Fox River at Berlin finally went below its 13 foot flood stage at 0700CST on July 9, 2004 (it rose above its flood stage at 2115CST on May 25th). It wasn't until 0700CST on July 17th that the Fox River at Berlin finally receded below bankfull at 12 feet. The Fox River upstream at Princeton fell below its 9.5 feet flood stage at 1015CST on July 1, 2004, and below its bankfull stage of 7.5 feet at 0600CST on July 18th. The Rock River at Ft. Atkinson (Jefferson Co.) fell below its flood stage of 6 feet at 0630CST on July 2, 2004, and below its bankfull stage of 4.5 feet at 1705CST on July 14th. Downstream on the Rock River at Newville, the water level didn't fall below its 10 feet flood stage until 1900CST on July 6th, and below its bankfull level of 9 feet until 0200CST on July 16th. Further downstream, the Rock River at Afton didn't fall below its flood stage of 9 feet until 0830CST on July 8th, and below its bankfull stage of 8 feet until 0700CST on July 15th. Crop losses continued (estimated $100K in Green Lake and Jefferson counties, and $200K in Rock County), however, the bulk of the crop damage was logged in the May and June, 2004 monthly StormData publications.

Green County

1.5 SW Juda to 1.2 SE Juda **06** **1938CST** **1942CST** **2** **50** **0** **0** **Tornado (F0)**

A weak F0 tornado (60 to 70 mph) briefly spun up in southern Green County, south of the Juda area. Specifically, It spun up one-half mile north of the intersection of Burkow Rd and Norton Rd., and ended northwest of the intersection of Geise and Bagley Roads. It traveled northeastward, uprooting trees, and moved a hog shed. Average path width was about 30 yards

Jefferson County

Lake Mills **11** **1830CST** **0** **0** **Funnel Cloud**

Jefferson County

3.4 SSW Watertown **11** **1841CST** **0.1** **25** **0** **0** **Tornado (F0)**

A weak F0 tornado (40 to 45 mph) briefly spun up 3.4 miles southwest of Watertown and produced no damage. Specifically, it spun up about one-half mile west of STH 26 in the center of an area bounded by CTH Y, Ebenezer Rd., and High Rd.

Dane County

1.6 SW East Bristol **11** **1843CST** **0.1** **25** **0** **0** **Tornado (F0)**

A weak F0 tornado (40 to 45 mph) briefly spun up 1.6 miles southwest of East Bristol and produced no damage. Specifically, its estimated spin up location is about one-half mile west-northwest of the intersection of Mueller Rd and Russett Rd.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Columbia County

Columbus	**11**	**1850CST**			**0**	**0**			**Funnel Cloud**

Two weak tornadoes and two reports of funnel clouds were reported during the late afternoon of July 11th. A large upper level low positioned in southeast Canada helped to produce scattered showers and thunderstorms. With cold air aloft for the season and sufficient vertical wind shear, a couple of weak tornadoes resulted. No damage was reported with either tornado. Refer to individual tornado reports for details.

Fond Du Lac County

2 S Vandyne	**13**	**1514CST**			**0**	**0**	**15K**		**Hail(2.00)**

Sheboygan County

5 W Cascade	**13**	**1605CST**			**0**	**0**			**Hail(0.75)**

Sheboygan County

5 W Cascade	**13**	**1605CST**			**0**	**0**			**Thunderstorm Wind (EG52)**

A small cluster of thunderstorms pulsed to severe limits and generated damaging straight-line winds and large hail. Some vehicles were dented by the large hail.

Sauk County

La Valle to North Freedom	**16**	**0753CST 0812CST**			**0**	**0**	**5K**		**Hail(1.00)**

Sauk County

Rock Spgs	**16**	**0807CST**			**0**	**0**			**Thunderstorm Wind (EG52)**

Sauk County

North Freedom	**16**	**0819CST**			**0**	**0**	**5K**		**Thunderstorm Wind (EG56)**

Sauk County

Leland	**16**	**0825CST 0828CST**			**0**	**0**	**5K**		**Hail(1.00)**

Dane County

Belleville	**16**	**0943CST 1143CST**			**0**	**0**			**Thunderstorm Wind (MG58)**

Green County

Dayton	**16**	**0952CST**			**0**	**0**	**5K**		**Hail(1.00)**

Green County

Dayton	**16**	**0952CST**			**0**	**0**	**5K**		**Thunderstorm Wind (EG56)**

Waukesha County

Oconomowoc	**16**	**1105CST**			**0**	**0**			**Hail(0.75)**

Waukesha County

Delafield	**16**	**1127CST**			**0**	**0**			**Hail(0.75)**

Fond Du Lac County

2 ESE Fond Du Lac	**16**	**1222CST**			**0**	**0**			**Funnel Cloud**

Fond Du Lac County

Fond Du Lac	**16**	**1234CST**			**0**	**0**			**Hail(0.75)**

Marquette County

7 SE Endeavor	**16**	**1315CST**			**0**	**0**	**1K**		**Thunderstorm Wind (EG61)**

Columbia County

3.8 NNW Pardeeville to 2 W Wyocena	**16**	**1325CST 1335CST**			**0**	**0**	**5K**		**Thunderstorm Wind (EG65)**

Ozaukee County

Belgium	**16**	**1325CST**			**0**	**0**	**5K**		**Thunderstorm Wind (EG56)**

Dodge County

4 NE Iron Ridge	**16**	**1326CST**			**0**	**0**			**Funnel Cloud**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

Washington County

Allenton	**16**	**1329CST**			**0**	**0**			**Funnel Cloud**

Columbia County

2.6 SW Wyocena to 5.5 NE Poynette	**16**	**1340CST 1342CST**	**0.5**	**30**	**0**	**0**	**1K**	**20K**	**Tornado (F0)**

A weak F0 tornado (60 to 70 mph) spun up 2.6 miles southwest of Wyocena and traveled south-southeast for about one-half mile to a point about 5.5 miles northeast of Poynette. Specifically, it spun up about 0.4 mile north of the intersection of Phillips Rd. and Langdon Rd., and ended about 0.3 mile southeast of the same intersection. Trees were uprooted and crops were damaged. Some lawn furniture and other personal belongings were damaged.

Columbia County

3.5 NE Dekorra to 1.3 N Poynette	**16**	**1420CST 1425CST**			**0**	**0**			**Thunderstorm Wind (EG56)**

Milwaukee County

.2 N Milwaukee Mtchell	**16**	**1434CST**			**0**	**0**			**Thunderstorm Wind (EG50)**

Sauk County

Merrimac	**16**	**1435CST**			**0**	**0**	**5K**		**Hail(0.88)**

Dane County

3 NE Madison	**16**	**1441CST**			**0**	**0**	**15K**		**Hail(1.75)**

Dane County

Madison	**16**	**1441CST**			**0**	**0**			**Thunderstorm Wind (MG56)**

Dane County

4.5 NNE Madison	**16**	**1456CST**			**0**	**0**			**Thunderstorm Wind (EG52)**

Dane County

Middleton to 3 NE Madison	**16**	**1500CST 1700CST**			**0**	**0**			**Heavy Rain**

Scattered showers and thunderstorms developed continuously throughout the day as a surface trough pushed into south-central and southeast Wisconsin. Several of these storms pulsed to severe levels and produced damaging winds and large hail. Trees and power lines were toppled by the powerful winds. In addtion, several funnel clouds were reported across Columbia, Jefferson, Dodge, Washington, and Fond du Lac county, and one weak tornado spun up 2.6 miles southwest of Wyocena and dissipated at 5.5 miles northeast of Poynette. Refer to the individual tornado report for more details. Numerous reports of trees damage were noted as a result from damaging winds from Sauk County, to Dane, Columbia, and Marquette counties. More damage resulted when hail pelted cars across parts of Sauk, Dane, Green, and Waukesha counties. Two to three inches of rain fell within a two hour timespan (WSR-88D estimate) resulting in urban flooding in the Middleton to Madison area. Brief water depths of 1 to 3 feet slowed traffic or stalled cars.

Iowa County

4 W Cobb to 4 E Mineral Pt	**21**	**0615CST 0635CST**			**0**	**0**	**50K**		**Thunderstorm Wind (EG65)**

Dane County

Mt Horeb	**21**	**0705CST**			**0**	**0**	**5K**		**Thunderstorm Wind (EG52)**

Columbia County

2 W Poynette	**21**	**0735CST**			**0**	**0**	**5K**		**Thunderstorm Wind (EG52)**

Racine County

Racine	**21**	**1310CST**			**0**	**0**	**10K**		**Thunderstorm Wind (MG55)**

A weakening complex of thunderstorms moving across southern Wisconsin during the morning hours on the 21st produced damaging winds which downed some trees and power lines in parts of Iowa, Dane, Columbia, and Racine counties

National Weather Service
Storm Data and Unusual Weather Phenomena

August 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
LAKE MICHIGAN									
LMZ643	**Sheboygan To Pt Washington Wi**								
Sheboygan	**27**	**0102CST**			**0**	**0**			**Marine Tstm Wind (MG38)**
LMZ646	**Wind Pt Lt Wi To Winthrop Hbr Il**								
Kenosha	**27**	**0200CST**			**0**	**0**			**Marine Tstm Wind (MG37)**
	Thunderstorms with strong wind gusts moved out over Lake Michigan after leaving damage behind over parts of south-central and southeast Wisconsin.								
WISCONSIN, Southeast									
Sauk County									
Baraboo to 5 SE Baraboo	**02**	**0859CST 0905CST**			**0**	**0**			**Hail(1.00)**
	A thunderstorm pulsed to severe limits and dumped some large hail. No damage was noted. This lone severe storm was embedded in a line of storms that moved east across south-central Wisconsin.								
Sauk County									
1 N La Valle	**03**	**1505CST**			**0**	**0**			**Hail(0.88)**
Sauk County									
Reedsburg	**03**	**1543CST**			**0**	**0**			**Hail(1.75)**
Sauk County									
2 SE Reedsburg	**03**	**1547CST**			**0**	**0**			**Hail(1.75)**
Sauk County									
1 W Baraboo	**03**	**1554CST**			**0**	**0**			**Hail(1.25)**
Sauk County									
Lake Delton	**03**	**1554CST**			**0**	**0**			**Hail(1.00)**
Columbia County									
Rio to Columbus	**03**	**1610CST 1630CST**			**0**	**0**	**6M**	**1M**	**Hail(3.00)**
Columbia County									
Rio to Columbus	**03**	**1610CST 1630CST**			**0**	**0**	**3M**		**Thunderstorm Wind (EG65)**
Columbia County									
Wisconsin Dells to Wyocena	**03**	**1625CST 1830CST**			**0**	**0**	**15K**		**Flash Flood**
Sauk County									
Merrimac	**03**	**1626CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Sauk County									
La Valle	**03**	**1645CST**			**0**	**0**	**1K**		**Lightning**
Dodge County									
Watertown	**03**	**1717CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Jefferson County									
Watertown	**03**	**1719CST**			**0**	**0**	**20K**		**Thunderstorm Wind (EG56)**
Sauk County									
Lake Delton	**03**	**1750CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Washington County									
West Bend	**03**	**1830CST 1900CST**			**0**	**0**	**5K**		**Lightning**
Dane County									
Verona to 2 NE Middleton	**03**	**1838CST 1854CST**			**0**	**0**			**Thunderstorm Wind (EG56)**

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
WISCONSIN, Southeast									
Dane County									
Madison to Sun Prairie	**03**	**1900CST 2030CST**			**0**	**0**			**Heavy Rain**
Waukesha County									
Waukesha	**03**	**1900CST 1945CST**			**0**	**0**	**20K**		**Thunderstorm Wind (EG45)**
Jefferson County									
Jefferson to Ft Atkinson	**03**	**1915CST 2100CST**			**0**	**0**	**30K**		**Flash Flood**
Rock County									
3.5 SW Afton	**03**	**1930CST 1940CST**			**0**	**0**	**100K**		**Thunderstorm Wind (EG61)**
Waukesha County									
Oconomowoc to Waukesha	**03**	**1930CST 2100CST**			**0**	**0**	**50K**		**Flash Flood**
Waukesha County									
Waukesha	**03**	**1930CST**			**0**	**0**	**100K**		**Lightning**
Rock County									
Beloit	**03**	**1940CST**			**0**	**0**	**10K**		**Lightning**

Clusters of severe thunderstorms moved southeast through south-central and southeast Wisconsin, resulting in damaging straight line winds that toppled large trees, very large damaging hail, and heavy rains that led to flash flooding. Columbia County suffered the most damage thanks to hurricane-force thunderstorm winds coupled with large hail stones of 1 to 3 inches in diameter. The wind-driven hail damaged at least 100 homes and several businesses and churches in Fall River (Columbia Co.). The wind-driven hail also mowed down some corn and soybean fields between Rio and Columbus. Some of the hail stones were still unmelted the next morning. Flash flooding resulted in gravel shoulder washouts and flooded buildings and basements in the Wisconsin Dells to Wyocena area of Columbia County. Rainfall amounts of 2.50 inches were measured in about 1 to 2 hours in the Portage area (Columbia Co.). Flash flooding also occurred in the Jefferson to Ft Atkinson area of Jefferson County, with gravel shoulder washouts and flooded buildings and basements reported. Rainfall totals up to 2 inches in only 30 minutes were noted on the south side of Ft Atkinson where many cars stalled on flooded roads. Over in Waukesha County, similar flash flooding was noted from Oconomowoc to the city of Waukesha thanks to rains of 2 to 3.39 inches in only 2 hours. The Oconomowoc WWTP reported the 3.39 inches. A downburst wind event south of Afton (Rock Co.) resulted in 1 shed being destroyed, 1 shed and 1 garage damaged, and 2 vehicles dented by debris. Lightning hit a substation transformer in the city of Beloit, knocking power out to 3500 homes. Other lightning strikes damaged a condo unit in in the city of Waukesha, damaged a home's electrical system (West Bend, Washington Co.), and damaged a home's roof in La Valle (Sauk Co.). Utility companies estimated that a grand total of about 7500 custormers lost power during the storms thanks to trees or tree branches falling on power lines, or electrical strikes

Waukesha County									
Waukesha	**15**	**1400CST**			**0**	**0**	**0.20K**		**Dust Devil**

A dust devil affected a public pool in the City of Waukesha while traveling for about 100 yards. It ripped up some volleyball nets and blew umbrellas off tables. It ingested water from the pool and had dust and leaves embedded in its circulation that extended up to about 100 feet above the ground surface. The afternoon maximum temperature at the Waukeshsa airport was only 73, with maximum readings in southeast Wisconsin in the 75 to 80 degrees range. Only 4 days earlier, a very cold airmass settled over southern Wisconsin. Maximum temperatures on August 11th were only 59 at Madsion (old record for low maximum was 64 set in 1913), and 60 at Milwaukee (old record for low maximum was 63 set in 1988). Other locations in southern Wisconsin topped out in the 56 to 63 range.

WISCONSIN, Southeast

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
Lafayette County									
4 W Belmont	**26**	**2230CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Lafayette County									
1 S Gratiot	**26**	**2245CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Sauk County									
Lake Delton	**26**	**2300CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Columbia County									
Pardeeville	**26**	**2310CST**			**0**	**0**	**400K**		**Thunderstorm Wind (EG70)**
Green County									
Browntown to Monroe	**26**	**2330CST 2340CST**			**0**	**0**	**20K**		**Thunderstorm Wind (EG56)**
Dane County									
Madison	**26**	**2345CST**			**0**	**0**	**30K**		**Thunderstorm Wind (EG56)**
Dodge County									
3 NW Fox Lake	**26**	**2350CST**			**0**	**0**	**20K**		**Thunderstorm Wind (EG56)**
Fond Du Lac County									
4 SSE Eldorado to Fond Du Lac	**26 27**	**2353CST 0007CST**			**0**	**0**	**200K**		**Thunderstorm Wind (EG65)**
Fond Du Lac County									
Ripon	**27**	**0005CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Sheboygan County									
7 W Cascade	**27**	**0039CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Rock County									
2 E Beloit	**27**	**0043CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Walworth County									
1.8 SW Delavan	**27**	**0050CST**			**0**	**0**			**Thunderstorm Wind (MG52)**
Walworth County									
2 SW Pell Lake	**27**	**0055CST**			**0**	**0**	**30K**		**Thunderstorm Wind (EG61)**
Kenosha County									
Twin Lakes	**27**	**0100CST**			**0**	**0**	**10K**		**Thunderstorm Wind (EG56)**
Kenosha County									
.5 W Paddock Lake to 4 S Salem	**27**	**0110CST**			**0**	**0**			**Thunderstorm Wind (EG61)**
Racine County									
Burlington	**27**	**0125CST**			**0**	**0**			**Thunderstorm Wind (EG52)**

A line of thunderstorms bowed out as it moved through south-central and southeast Wisconsin, resulting in locally, powerful, downburst, straight-line wind gusts that leveled large trees and power lines. Pardeeville (Columbia Co.) had the worst downburst (estimated wind gusts to 70 knots, or 80 mph) with about 4 dozen homes damaged (siding and gutters). Many vehicles in Pardeeville were damaged by tree limbs or debris. Two barns and 2 homes were damaged in the Eldorado to Fond du Lac area (Fond du Lac Co.) thanks to powerful wind gusts to about 65 knots (75 mph). In Madison (Dane Co.), a wind-toppled tree fell onto a home, trapping a man in his bed. Crop damage was photographed southwest of Pell Lake (Walworth Co.) by an ultralight pilot. In the Twin Lakes area (Kenosha Co.), large tree branches damaged a home and a vehicle. Utility companies noted that about 8000 customers lost power during the storms, wtih 1500 alone in Columbia County.

National Weather Service
Storm Data and Unusual Weather Phenomena

September 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

WIZ052-059>060 **Sheboygan - Washington - Ozaukee**

04 **0000CST** **0** **0** **Dense Fog**
0800CST

Dense fog developed during the overnight hours and lowered visibilities to below 1/4 mile. At times, visibilities were down to 50 feet in locations between West Bend and Germantown in Washington County. School bus rides and local aviation traffic were delayed, and travel on main roads and interstates slowed down considerably. Off shore, the dense fog persisted over the Lake Michigan waters until about 1300CST. Fair skies and a light southeast wind off Lake Michigan were factors in this dense fog event

Sheboygan County

Plymouth **15** **1535CST** **0** **0** **5K** **Thunderstorm Wind (EG50)**

A thunderstorm pulsed to minimal severe weather limits and toppled some large trees and power lines

Lafayette County

Argyle **23** **1200CST** **0** **0** **10K** **Thunderstorm Wind (EG56)**

An isolated severe storm, embedded in a cluster of general thunderstorms, generated locally powerful downburst thunderstorm winds in the Argyle area. About a dozen large trees and some power lines were toppled. The time is estimate, with the event taking place sometime between 1100 and 1300CST.

National Weather Service
Storm Data and Unusual Weather Phenomena

October 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

LAKE MICHIGAN

LMZ646 **Wind Pt Lt Wi To Winthrop Hbr Il**

Kenosha **29** **2055CST** **0** **0** **Marine Tstm Wind (MG58)**

A thunderstorm pulsed to severe limits as it moved offshore from Kenosha. A nearshore automated observation site measured gusts to 58 knots (67 mph). This severe storm was related to scattered severe storms that had moved through south-central and southeast Wisconsin during the evening hours of October 29th.

WISCONSIN, Southeast

WIZ056-062 **Sauk - Iowa**

10 **0430CST** **0** **0** **Dense Fog**
0730CST

Dense fog developed shortly before sunrise in the Wisconsin River Valley, reducing visibilities to 1/8 to 1/4 mile. School buses were delayed a couple hours, and airplane traffic at the Lone Rock airport were delayed

WIZ052-060 **Sheboygan - Ozaukee**

10 **2100CST** **0** **0** **Dense Fog**
11 **0600CST**

Dense fog developed overnight, reducing visibilities to 1/8 to 1/4 miles. Some school buses were delayed a couple hours, and some airplane traffic was delayed.

WIZ051-059 **Fond Du Lac - Washington**

11 **0000CST** **0** **0** **Dense Fog**
0600CST

Dense fog developed overnight, reducing visibilities to 1/8 to 1/4 miles. Some school buses were delayed a couple hours, and some airplane traffic was delayed.

WIZ062>063-067>068 **Iowa - Dane - Lafayette - Green**

12 **0200CST** **0** **0** **Dense Fog**
0800CST

Dense fog developed overnight, reducing visibilities to 1/8 to 1/4 miles. Some school buses were delayed a couple hours, and some airplane traffic was delayed.

WIZ064>066-069>072 **Jefferson - Waukesha - Milwaukee - Rock - Walworth - Racine - Kenosha**

12 **0200CST** **0** **0** **Dense Fog**
0700CST

Dense fog developed overnight, reducing visibilities to 1/8 to 1/4 miles. Some school buses were delayed a couple hours, and some airplane traffic was delayed.

WIZ051>052-058>060 **Fond Du Lac - Sheboygan - Dodge - Washington - Ozaukee**

12 **0300CST** **0** **0** **Dense Fog**
1000CST

Dense fog developed overnight, reducing visibilities to 1/8 to 1/4 miles. Some school buses were delayed a couple hours, and some airplane traffic was delayed.

Green Lake County

Berlin **23** **1224CST** **0** **0** **Hail(0.88)**

Scattered thunderstorms developed over south-central Wisconsin and then moved northeast. One storm briefly pulsed to severe limits and dumped some large hail. Afternoon maximum temperatures were in the lower 70s, or about 15 degrees above normal. As low pressure tracked northeast through northwest Wisconsin, a broken line of cells moved northeast at 35 knots (40 mph) through the Green Lake County area.

WIZ062>063-067>068 **Iowa - Dane - Lafayette - Green**

28 **2200CST** **0** **0** **Dense Fog**
29 **0400CST**

Dense fog developed overnight, reducing visibilities to 1/8 to 1/4 miles. Some vehicle accidents were noted in newspapers.

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
WISCONSIN, Southeast									
Kenosha County									
5 W Kenosha	**29**	**2049CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Lafayette County									
2 S Belmont	**29**	**2130CST**			**0**	**0**			**Thunderstorm Wind (EG52)**
Rock County									
3 SE Orfordville	**29**	**2235CST**			**0**	**0**			**Hail(0.75)**
Rock County									
1 S Orfordville	**29**	**2239CST**			**0**	**0**			**Thunderstorm Wind (EG56)**
Jefferson County									
3 SW Palmyra	**29**	**2320CST**			**0**	**0**			**Thunderstorm Wind (EG52)**

A late-season severe weather outbreak affected parts of south-central and southeast Wisconsin. Locally powerful downburst wind gusts of 52 to 56 knots (60-65 mph) toppled large trees, and there was a report of large hail. The storms, in the form of bowed lines along a near a cold front, moved quickly from west to east at 50 to 60 knots (58 to 69 mph) thanks to a strong jet stream aloft. One toppled tree caught fire after pulling down a power line southesat of Orfordville (Rock Co.). Synoptically, a very strong vorticity maxima at 500 mb moved east through the Wisconsin/Illinois stateline area. A strong cold front plowed into unstable air with LI's of -6 and CAPE's of 1500-2000. Maximum afternoon temperatures peaked in the mid 70s F, or about 20 degrees above normal.

National Weather Service
Storm Data and Unusual Weather Phenomena

November 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

WIZ065-069>072 **Waukesha - Rock - Walworth - Racine - Kenosha**

30	**1600CST** **2300CST**	**0**	**0**		**Winter Weather/Mix**

The frist widespread accumulating snow of the season for parts of south-central and southeast Wisconsin occurred on November 30th. Snow totals, in general, ranged from 2.5 to 4.5 inches, but a NWS co-op observer in Genoa City in southeast Walworth County mesaured 5.9 inches. No snow was reported west of a line from Sheboygan (Sheboygan Co.) to West Bend (Washington Co.) to Lake Mills (Jefferson Co.) to Evansville (Rock Co.) to Brodhead (Greeen Co.). Spotter reports indicated that the snowflakes were rather large - at times up to 3/4 to 1 inch in diameter. Rain was mixed in with the snow at times near Lake Michigan. Dozens of vehicle accidents were reported by newspapers, and travel times were extended as road surfaces became slippery. Evening media newscasts suggested that drivers forgot how to drive on snow covered, slippery roads. Specific snow accumulations include 2.5 inches on the University of Wiconsin-Milwaukee campus (Milwaukee Co.), 2.9 inches at a location 4 miles south of the City of Waukesha (Waukesha Co.), 3.5 inches in Clinton (Rock Co.), 4.4 inches in Burlington (Racine Co.), and 4.5 inches in Paddock Lake (Kenosha Co.).

National Weather Service
Storm Data and Unusual Weather Phenomena

December 2004

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

WIZ046>047-056>057 **Marquette - Green Lake - Sauk - Columbia**

06	**1300CST**	**0**	**0**			**Dense Fog**
07	**0400CST**					

Dense fog developed during the daytime hours and persisted through most of the night. Visibilities were reduced to 1/8 to 1/4 mile. Several vehicle accidents were noted in local newspapers

WIZ052-059>060-062-065>068-071>072 **Sheboygan - Washington - Ozaukee - Iowa - Waukesha - Milwaukee - Lafayette - Green - Racine - Kenosha**

06	**1800CST**	**0**	**0**			**Dense Fog**
07	**0500CST**					

Dense fog developed overnight and reduced visibilities to 1/8 to 1/4 mile. Several vehicle accidents were noted in local newspapers, and some airline flights were delayed.

WIZ062>063-067>069 **Iowa - Dane - Lafayette - Green - Rock**

09	**1900CST**	**0**	**0**			**Dense Fog**
10	**0200CST**					

Dense fog developed overnight and reduced visibilities to 1/8 to 1/4 mile. Several vehicle accidents were noted in local newspapers, and some airline flights were delayed.

WIZ064>066-070>072 **Jefferson - Waukesha - Milwaukee - Walworth - Racine - Kenosha**

09	**2300CST**	**0**	**0**			**Dense Fog**
10	**0800CST**					

Dense fog developed overnight, reducing visibilities to 1/8 to 1/4 mile. Several vehicle accidents were noted in newspapers, and some airline flights were delayed.

WIZ046>047-051>052-056>060-062>072 **Marquette - Green Lake - Fond Du Lac - Sheboygan - Sauk - Columbia - Dodge - Washington - Ozaukee - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha**

12	**0600CST**	**0**	**0**	**34K**		**Strong Wind (MG40)**
	1900CST					

Strong, post, cold-frontal winds affected south-central and southeast Wisconsin for about a 9-hour period. Sustained northwest winds were in the 17 to 26 knot range (20 to 30 mph) with gusts of 39 to 49 knots (45 to 56 mph). Newspapers and spotter reports indicated that some outdoor Christmas lights and ornaments were damaged, small to medium-sized tree branches were knocked out of trees. Several vehicles were damaged by the tree debris. The damage amounts are rough guesses. Some peak measured wind gusts include: 40 knots (46 mph) in Westfield (Marquette Co.), 48 knots (55 mph) in Taycheedah (Fond du Lac Co.), 43 knots (49 mph) in Sheboygan (Sheboygan Co.), 41 knots (47 mph) in Reedsburg (Sauk Co.), 41 knots (47 mph) in Columbus (Columbia Co.), 43 knots (50 mph) in Jackson (Washington Co.), 40 knots (46 mph) in Mequon (Ozaukee Co.), 46 knots (53 mph) in Mineral Point (Iowa Co.), 46 knots (53 mph) on the west side of Madison (Dane Co.), 47 knots (54 mph) in Brookfield (Waukesha Co.), 49 knots (56 mph) at the WTMJ TV station in Milwaukee (Milwaukee Co.), 47 knots (54 mph) in Brodhead (Green Co.), 39 knots (45 mph) at the Janesville Airport (Rock Co.), 43 knots (49 mph) on the UW-Whitewater campus (Walworth Co.), 43 knots (50 mph) in Union Grove (Racine Co.), and 43 knots (50 mph) on the lakeshore of Kenosha (Kenosha Co.). Many of these measured wind gusts were courtesy of school weather nets operated by TV-15 in Madison and TV-6 in Milwaukee. Estimated wind gusts to 43 to 46 knots (50 to 53 mph) occurred in west-central Sheboygan Co., northeastern Lafayette Co., extreme southeast Jefferson Co., northeastern Walworth Co., western Racine Co., and northeastern Kenosha Co., based on graphical analysis of all peak wind gusts reported.

WIZ056>058-060-062>072 **Sauk - Columbia - Dodge - Ozaukee - Iowa - Dane - Jefferson - Waukesha - Milwaukee - Lafayette - Green - Rock - Walworth - Racine - Kenosha**

18	**0600CST**	**0**	**0**			**Winter Weather/Mix**
	1200CST					

A light freezing drizzle coated roads and bridges during the morning hours. Newspaper reported indicated numerous vehicle accidents occurred, with vehicles sliding off roads or crossing median stripes and hitting other vehicles, or rolling over. Some accidents were multi-vehicle and emergency workers were kept busy throughout the morning hours. One person died (indirectly-related fatality) in a collision on Interstate 90/94 near Lodi (Columbia Co.). Three other people were injured

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm

WISCONSIN, Southeast

(indirectly-related to this weather event) in this accident.

WIZ046>047 **Marquette - Green Lake**

20	**0400CST**			**0**	**0**		**Winter Weather/Mix**
21	**1200CST**						

Snow accumulations of 4 to 5.5 inches were noted by spotters and snowplow truck drivers in the northern parts of Marquette and Green Lake counties. This was the first widespread accumulating snow for the winter season for this area. Newspapers noted several vehicle accidents, and longer travel times. This snow was part of a heavy snow event (6 to 11.4 inches) that affected the area from La Crosse to Green Bay and Door County in northeastern Wisconsin

WIZ051>052-058>060-064>066-070>072 **Fond Du Lac - Sheboygan - Dodge - Washington - Ozaukee - Jefferson - Waukesha - Milwaukee - Walworth - Racine - Kenosha**

29	**2200CST**			**0**	**0**		**Dense Fog**
30	**0800CST**						

Dense fog developed overnight, reducing visibilities to 1/8 to 1/4 mile. Several vehicle accidents were noted in newspapers, and some airline flights were delayed. A moist south-southeast surface flow ahead of a low pressure allowed the dense fog to develop. A light drizzle/mist accompanied the dense fog.